LEGISLATIVE COUNCIL OF FIJI COUNCIL PAPER NO. 35 OF 1965

Colony of Fiji

MEDICAL DEPARTMENT

ANNUAL REPORT FOR THE YEAR 1964

Price : 4s. Government Press, Suva, Fiji

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FIJIAN SPELLING

Two systems of spelling Fijian names and words are in use in the Colony. The " Fijian " system was devised during the period 1835-37 by the Missionaries who first reduced the Fijian language to writing. They aimed at representing the various Fijian sounds by single letters and the system that resulted has been used ever since by the Fijian people and is in general use within the Colony. The letters concerned are " b ", " c ", " d ", " g ", and " q " and the following examples indicate the manner in which they are pronounced.

(i) B is pronounced " MB " as in number, e.g. LABASA = LAMBASA.
(ii) C is pronounced " TH " as in that, e.g. CAUTATA = THAUTATA.
(iii) D is pronounced " ND " as in end, e.g. NADI = NANDI.
(iv) G is pronounced " NG " as in sing, e.g. NASIGATOKA = NASINGATOKA.
(v) Q is pronounced " NGG " as in finger, e.g. YAQARA = YANGGARA.

In practically all words in Fijian, the accent is on the penultimate syllable.

2. The " phonetic " system is a more recent attempt to render Fijian words in English spelling. It is used in maps and in documents designed primarily for overseas reading, e.g. MBAU (BAU), THAKOMBAU (CAKOBAU), NANDI (NADI), NANDRONGA (NADROGA), MBENGGA (BEQA).

CONTENTS

APPENDICES

LEGISLATIVE COUNCIL OF FIJI COUNCIL PAPER NO. 35 OF 1965

MEDICAL DEPARTMENT

(Annual Report for 1964)

I—GENERAL REVIEW

This report gives an account of the activities of the Medical Department during 1964. It is a chapter in the medical life history of Fiji and represents one frame in a moving picture which extends from the past forward into the future.

2. Administrative drive is stimulated by the desire, not to say the demand, for improved services, but the problem is how to provide these services at a price that a developing community can afford.

3. Medicine has a considerable part to play in economic development. An unfit nation cannot be a prosperous one. The Medical Service must however feedback upon the country's economic prosperity for its own sustenance. A healthy Medical Department must therefore live in a symbiotic union with the economic growth of the country.

4. Every effort, has therefore, been made to examine closely all aspects of medical expenditure to obtain the greatest possible value for money. The financial pattern of the Department has been carefully re-shaped over the last few years, so that although considerable Departmental development has been achieved the recurrent cost of medical services *per capita* has remained remarkably static. In fact, the net recurrent cost of the Department in 1964 was less than in 1963, if one allows for the cost of the 1964 salary revision, which was, in essence, the recognition by Government of the rising cost of living. The gross medical expenditure as expressed as a percentage of the overall total budget fell by nearly 1 per cent to a new low of 10·14 per cent while 13·97 per cent of this expenditure was recovered as revenue and this figure represented a new high.

5. The economic climate of Fiji showed continued improvement during the year. The Department is all too well aware however that the benefit to the individual of economic growth can be jeopardized by too rapid an increase of the population, even if as in Fiji, the provision of actual living space for the larger population represents no great problem.

6. The Department therefore views its Family Planning Campaign as one of its most important activities and is glad to acknowledge the considerable part played by the Family Planning Association in the progress made. Both organizations are confident that the Campaign will succeed if sufficient financial and moral support is forthcoming. The trend of a falling birth rate has continued and it is hoped that the record attendance of 18,000 at Family Planning Clinics during 1964 will have a considerable effect on the birth rate in 1965.

7. The Department is satisfied from the research conducted by the Family Planning Clinic in Suva on intrauterine devices that this new development will be of considerable value to the Campaign in Fiji. The organization is therefore being set up to provide facilities for fitting these devices at all main medical centres in Fiji.

8. A comprehensive immunization programme which was commenced in 1963 among school children was extended to pre-school children in 1964. Its effects can already be detected in the statistics set out in Table XIX. Only one case of diphtheria was recorded in the Colony during the year and this in a child who had not been immunized. Poliomyelitis was absent from the Colony for the second year in succession. It is confidently expected that the Colony will not again be visited by this scourge so long as the level of immunity produced by immunization is maintained. No case of typhoid fever was notified during the year. The incidence of tetanus remained steady but it is hoped that the increasing public health attention being given to this disease will soon have its desired effect.

9. The current position as far as tuberculosis is concerned is summarized in Table XXII. It must be appreciated that tuberculosis is essentially a disease of Fijians in that, although the incidence in Indians and Europeans is low and comparable, the incidence among Fijians is ten times that found among Europeans and seven times that found among Indians. Nevertheless, it is felt that the Campaign which has been waged for upwards of ten years is gaining relentlessly over the disease and that intensified activity will now give increasingly rapid results.

10. Although the number of new cases registered over the last five years as shown in Table XXI has fallen relatively slowly an examination of the quarterly figures shows that a significant change happened in the second half of 1963. Before this a graph of the quarterly notifications presents an oscillating saw-toothed pattern with an overall downward slope but from the third quarter of 1963 the figures have shown a consecutive decline. The indications are that the slope of this decline is now steepening. It is hoped therefore that 1965 will show a more dramatic reduction in the incidence of this disease.

11. The attack on leprosy is also being intensified and the reduction in new cases registered is encouraging. The advent of specific therapy for the disease has completely changed the outlook in Fiji. The number of in-patients now treated at Makogai makes the continuation of the island as a leprosy hospital completely uneconomic. Plans are being prepared to build a modern but smaller hospital in Suva and the Lepers' Trust Board of New Zealand has generously agreed to contribute £40,000 towards the cost of the new hospital.

12. A considerable amount of effort has been put into the reorganization of the rural health service. It is planned to divide each division into a series of sub-districts under the control of a sub-district medical officer who will be supported by a team which will include a health sister and a health inspector. This team will direct and co-ordinate Departmental policy within the area. Sub-district headquarters are being constructed under the capital works programme and transportation is being provided for sub-district teams.

13. The programme for the rural health service includes development of—

(*a*) Clinical Services;
(*b*) Immunization Control;
(*c*) Family Planning;
(*d*) Environmental Sanitation;
(*e*) Tuberculosis and Leprosy Control.

14. The development of the programme for environmental sanitation includes a water-seal latrine programme, and measures aimed at improvement of rural water supplies. The water-seal programme achieved some success during the year and it is hoped to step up the programme in 1965. By the end of the year it appeared likely that assistance would be forthcoming from the World Health Organization and United Nations Children's Fund to speed up the development of rural water supplies.

15. Improvement in environmental sanitation in rural areas is necessary if we are to reduce the incidence of intestinal diseases especially infantile diarrhoea, infective hepatitis and hookworm infestation.

16. The Department is also interested in housing and the 1965 Estimates which were passed by Legislative Council at the close of 1964 included financial provision that will enable the Fiji School of Medicine to expand the valuable work already done on environmental sanitation to include the design of low cost rural housing.

17. The Department's policy of providing specialized training to local graduates of the Fiji School of Medicine has paid considerable dividends. Post-graduate education both in Fiji and overseas has been extended and it is pleasing to report that a locally qualified medical officer was accepted for the examination of the Diploma of Obstetrics in Auckland and two local medical officers were accepted at the close of the year by the University of Otago to take the course and examination for the Diploma in Public Health. Both these events represent landmarks in the history of the Fiji School of Medicine.

18. Clinical services have continued to expand during the year and the process of re-equipping the main centres has been extended. Considerable progress has been made at Labasa Divisional Hospital which has been structurally improved to provide better facilities including a new X-ray Department. This hospital now has good facilities and equipment and has specialist trained staff in surgery, obstetrics and tuberculosis. The process of development of the main clinical centres continues.

19. In Suva the new wing at the Colonial War Memorial Hospital and the new Virus Research Laboratory were far advanced at the close of the year and both are scheduled to open in mid-1965.

20. I would like to express my thanks to the people of Fiji for their active support of the Department, and to the many organizations that have taken up specific projects.

21. My thanks are also due to the officers of the Department who willingly and cheerfully work long hours in arduous conditions to maintain and improve Departmental services.

II—ORGANIZATION, ADMINISTRATION AND FINANCE

ORGANIZATION

22. With the introduction of the Membership System on 1st July, 1964, the Medical Department came within the portfolio of the Member for Social Services, who is now charged with a general oversight of medical policy.

23. The Department is organized in such a way as to provide as far as possible, particularly in rural areas, a close integration of curative and preventive services. The Director of Medical Services, as Head of the Department, is responsible for the administration of those services. He is assisted at headquarters by a Deputy Director, Assistant Director, Departmental Secretary, Nursing Superintendent, Chief Health Inspector, Accountant and clerical staff.

24. For administrative purposes, the Colony is divided into four divisions, coterminous with the general administrative divisions, each of which is in the charge of a Divisional Medical Officer who is responsible for the organization of the curative and preventive services in his area. He controls the work of the medical, nursing and ancillary staff in the division. Exceptions to this pattern are seen in the Central and Eastern Divisions, in which the Colonial War Memorial Hospital, the Colony's specialist centre, the Tamavua Tuberculosis Hospital, the St. Giles' Mental Hospital and the Makogai Leprosy Hospital are administered by Medical Superintendents directly responsible to the Director of Medical Services.

25. With the increasing emphasis on public health field activities, it has become apparent that it is not possible for Divisional Medical Officers to exercise the detailed technical control necessary for their success and a start was made on setting up medical sub-districts during 1964. These sub-districts correspond broadly, though not completely, with those of the District Administration. Sub-district medical offices were set up at Sigatoka, Savusavu, Navua and Taveuni. The system has been working well.

ESTABLISHMENT

26. Recruitment to the Department was on the whole satisfactory during the year, although difficulties were experienced in some directions.

27. Mrs. U. M. Stevenson, who had been acting as Nursing Superintendent, was appointed to that post as substantive holder. The post of Psychiatrist was filled in November, but the post of Paediatrician remained unfilled for the whole of 1964.

28. There is still a shortage of Assistant Medical Officers in the Department, and this position is not expected to change until 1966, when further graduates are expected from the Fiji School of Medicine. It was therefore necessary to continue the policy of re-employing retired members of the Department.

29. The localization of the nursing establishment continued during the year, and at 31st December, 1964, there were only 20 expatriates at post out of an establishment of 75 senior nursing posts.

30. The Departmental establishment in 1964 was—

1. Medical and Administrative Section—

Director of Medical Services	1
Deputy Director of Medical Services	1
Assistant Director of Medical Services	1
Secretary	1
Senior Medical Officers	3
Physician Specialist	1
Surgeon Specialists (2), Surgeon (1)	3
Ophthalmologist	1
Radiologist (1), Pathologist (1)	2
Anaesthetist	1
Gynaecologist/Obstetrician	1
Chest Physician	1
Paediatrician	1
Psychiatrist	1
Medical Officers (14), Assistant Medical Officers (131)	145
Senior Dental Officer (1), Dental Officer (1)	2
Assistant Dental Officers	12
Physiotherapists	2

2. Nursing Section—

Nursing Superintendent	1
Matrons and Assistant Matrons	5
Sisters-in-Charge	4
Nursing Sisters (53), Health Sisters (12)	65
Principal (1), Tutors (6), Nursing School	7
Junior Sisters (33), Nurses (414)	447

3. Technical Section—

Laboratory Superintendent	1
Chief Health Inspector (1), Health Inspectors (11)	12
Assistant Inspectors (Health and Mosquito)	64
Chief Laboratory Assistant (1), Laboratory Assistants (16)	17
Chief Pharmacist and Controller of Medical Supplies	1
Pharmacists (2), Assistants (8)	10
Radiographers (4), Assistants (6)	10
Supervising Dietitian	1
Assistant Dental Hygienists (7), Assistant Dental Mechanics (3)	10
Assistant Physiotherapists	2

4. Executive and Clerical Section—

Departmental Accountant	1
Higher Executive Officers (3), Executive Officers (5)	8
Clerical Staff	53

5. Supervisory Section—

Head Attendant, St. Giles' Hospital	1
Assistant Head Attendant (1), Orderlies, St. Giles' Hospital (38)	39
Caretaker, Makuluva Island	1
Storekeepers and Storemen	10
Assistant Dietitians and Housekeepers (10), Chief Cooks (5), Laundry Supervisors (4), Headseamstresses (2)	21
Receptionist	1
Subordinate Staff	637

6. Fiji School of Medicine—

Principal	
Medical Officers	2
Anatomy and Surgery Lecturer	1
Dental Officers	2
Senior Lecturers (4), Lecturers (2)	6
Assistant Medical Officer	1
Health Instructor	1
Executive Officer (1), Clerical Staff (3)	4
Laboratory Attendant (3), Chief Cook (1), Housekeeper (1), Subordinate Staff (14)	19

7. Fiji Leprosy Hospital—

Senior Assistant Medical Officer	1
Higher Executive Officer (1), Clerk (1)	2
Overseer (1), Ship's Master (1), School Teachers (2), Police (5)	9
Nursing Sisters (23), Assistant Nursing Sisters (11)	34
Subordinate Staff	41

8. Central Medical Research Library—

Assistant Librarian	1

FINANCE

31. Medical Department expenditure during the year was £1,017,154, an increase of £61,906 over that of 1963; of this, however, £42,808 was accounted for by increases of salary resulting from the acceptance by Government of the report of the Savage Commission. This expenditure was offset by revenue of £157,779, giving a cost of £2 3s. 0d. per head of population for the year.

32. Details are given in the tables which follow:—

TABLE I

ANALYSIS OF RECURRENT EXPENDITURE FOR THE YEARS 1955 TO 1964

Year	Actual Medical Expenditure	Actual Pacific Medical Expenditure	Total Expenditure	Total Recurrent Budget	Medical Expenditure Expressed as % of Total Budget	Pacific Medical Expenditure Expressed as % of Total Budget	Total Percentage	Total Population	Expenditure per head
	£	£	£	£	£				s. d.
1955 ..	608,816	104,732	713,548	5,832,426	10·43	1·75	12·18	345,164	36 3
1956 ..	689,329	114,965	804,294	6,367,125	10·82	1·80	12·62	357,881	40 2
1957 ..	728,919	123,201	852,120	6,609,992	11·04	1·86	12·90	361,038	42 7
1958 ..	769,822	118,225	888,047	6,734,739	11·43	1·75	13·18	374,284	44 0
1959 ..	784,707	116,576	901,283	6,516,687	12·04	1·78	13·82	387,646	42 2
1960 ..	840,223	111,255	951,478	7,052,874	11·91	1·57	13·48	401,018	42 0
1961 ..	871,434	104,119	975,553	7,412,694	11·75	1·40	13·15	413,872	42 0
1962 ..	917,878	106,879	1,024,757	8,043,167	11·41	1·33	12·74	427,851	42 0
1963 ..	955,248	114,601	1,069,849	8,611,613	11·09	1·33	12·42	441,301	42 5
1964 ..	1,017,154	112,075	1,129,229	10,026,497	10·14	1·12	11·26	456,390	43 0

The Expenditure per head of population is calculated on the net Medical Expenditure i.e. the total expenditure less the revenue for the year

TABLE II

Year	Total Medical Department Revenue	Gross Medical Department Recurrent Expenditure	Net Medical Department Recurrent Expenditure	Revenue Expressed as % of Expenditure
	£	£	£	%
1959	93,030	901,283	808,253	10·32
1960	110,103	951,478	841,375	11·57
1961	108,314	975,553	867,239	11·10
1962	129,329	1,024,757	895,428	12·62
1963	134,565	1,069,849	935,284	12·58
1964	157,779	1,129,229	971,450	13·97

TABLE III

DETAILS OF MEDICAL DEPARTMENT REVENUE

Description	1960	1961	1962	1963	1964
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
*Licences	622 0 0	623 10 0	701 0 0	754 10 6	857 0 0
Fumigation	1,739 16 11	2,391 7 8	3,008 4 1	2,723 2 7	2,866 17 8
*Hire of Plant and Vehicles	15 0 0	15 0 0	10 0 0	8 0 0	.....
Hospitals	41,681 0 10	41,838 15 11	65,174 3 2	79,844 18 6	95,055 10 0
Rest Houses and Quarantine Stations	116 5 0	147 12 0	174 8 0	96 3 0	63 4 7
*Publications and Printing	.....	.....	17 0 9	1 4 6	40 2 0
*Stores Allocated	502 2 4	950 9 1	1,222 3 4	1,314 17 4	1,704 0 9
Family Planning Materials	.....	.....	.....	666 3 6	2,776 10 2
*Unclaimed and Unserviceable Property	23 0 0	142 10 0	.....	15 14 1	7 2 6
Fiji Leprosy Hospital	17,113 18 4	13,469 4 0	6,470 7 6	2,406 7 6	6,045 18 9
Fiji School of Medicine	35,324 4 7	35,033 7 9	43,642 16 7	36,970 8 8	36,762 9 10
South Pacific Health Service	4,603 18 1	4,500 10 4	3,738 3 9	3,699 14 3	3,646 15 3
Medical Services Nadi Airport	936 10 11	1,097 16 7	1,149 2 0	849 6 9	2,146 13 1
Gold Mining Company on account of Medical Services	200 0 0	200 0 0	100 0 0	200 0 0	200 0 0
Central Nursing School	472 6 11	211 6 3	777 5 10	1,460 0 0	1,586 12 7
*Official Quarters	140 18 5	157 11 1	16 3 2	87 14 9	193 11 0
*Miscellaneous	661 19 0	622 12 6	577 19 1	469 12 8	530 19 8
*Recoveries of Overpayments	117 11 10	230 8 0	134 6 10	71 19 5	277 18 0
Produce Makogai	2,143 12 10	2,127 17 8	1,791 15 8	2,413 8 3	2,975 3 8
*Vessels and Punts Hire	.....	.....	.....	1 0 0	.....
Payment on account of Services of Government Officers	230 18 1	.....	596 11 10	493 16 8	.....
Nuffield Grant	3,440 0 0	4,546 11 2	.....	.....	.....
Meat Inspection	18 6 6	8 4 6	27 15 0	17 2 6	41 13 3
Totals	£110,103 10 7	£108,314 14 6	£129,329 6 7	£134,565 5 5	£157,778 2 9

* Estimate Figure; records unavailable

33. In addition to the above there is a certain amount of " hidden revenue " viz.:—

	£ s. d.
Proportion of money collected by Township Boards for licences that is retained by Government as payment for health services	6,013 0 0
Money paid by Fiji Military Forces for the services of an Assistant Medical Officer (including pension contribution)	840 2 11
Board paid by Assistant Medical Officers and Nurses living in	13,541 6 2
Portion of the salary of the Health Inspector seconded to the Lautoka Town Council (including pension contribution)	463 13 4
	£20,858 2 5

34. Value of issues of Medical Stores and Equipment—

TABLE IV

	Drugs and Dressings	Instruments and Appliances	Bedding, Linen, etc.	X-ray	Total
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Cash Sales	16 7 6	.....	.....	.....	16 7 6
Private Accounts	173 19 5	.....	.....	.....	173 19 5
Special Hospitals	9,702 10 8	128 6 6	3,420 8 10	1,775 0 7	15,026 6 7
General Hospitals	35,877 14 2	6,764 14 3	12,145 15 7	9,261 10 9	64,049 14 9
Rural Hospitals	6,337 8 5	627 1 6	3,832 5 4	367 19 4	11,164 14 7
Health Sisters	1,646 11 11	.....	404 16 8	.....	2,051 8 7
Dispensaries	7,255 0 5	.....	267 17 6	.....	7,522 17 11
Nurses	2,896 15 1	.....	389 15 4	.....	3,286 10 5
Other Medical	8,938 11 2	.....	1,660 8 2	.....	10,598 19 4
Missions	103 13 8	.....	6 0 8	.....	109 14 4
Other Departments	588 7 5	.....	.....	.....	588 7 5
Totals	£73,536 19 10	£7,520 2 3	£22,127 8 1	£11,404 10 8	£114,589 0 10

LEGISLATION

35. Legislation of medical interest enacted during the year was as follows:—
Ordinance No. 10—Public Health (Amendment) Ordinance, 1964.
Ordinance No. 17—Workmen's Compensation Ordinance, 1964.
Ordinance No. 18—Vaccination (Repeal) Ordinance.
Ordinance No. 24—Mental Treatment (Amendment) Ordinance, 1964.
Ordinance No. 27—Quarantine Ordinance, 1964.
Legal Notice No. 19—Poisons Order, 1964.

Legal Notice No. 20—Poisons (Amendment) Regulations, 1964.

Legal Notice No. 37—Poisons (Industrial and Agricultural) (Amendment) Regulations, 1964.

Legal Notice No. 39—Delegation of power of appointment of Board of Visitors, Rotuma Hospital to the Commissioner, Eastern Division.

Legal Notice No. 41—Resolution of Legislative Council under the Customs Duties Ordinance permitting duty free entry of equipment to approved hospitals.

Legal Notice No. 44—Pure Food (Amendment) Regulations, 1964.

Legal Notice No. 57—Public Health (Amendment) Regulations, 1964.

Legal Notice No. 75—Workmen's Compensation Regulations, 1964.

Legal Notice No. 82—Public Hospitals and Dispensaries (Amendment) Regulations, 1964.

Legal Notice No. 96—Proclamation under the Quarantine Ordinance.

Legal Notice No. 97—Proclamation under the Quarantine Ordinance.

Legal Notice No. 99—Proclamation of Mental Hospital under the Mental Treatment Ordinance.

Legal Notice No. 107—Poisons (Amendment) (No. 2) Regulations, 1964.

Legal Notice No. 111—Rotuma (Public Health) (Amendment) Regulations, 1964.

Legal Notice No. 124—Workmen's Compensation (Occupational Diseases) Regulations, 1964.

Legal Notice No. 154—Delegation of Powers under the Quarantine Ordinance, 1964.

Legal Notice No. 155—Notification of Coming into force of the Quarantine, Ordinance, 1964.

III—CLINICAL SERVICES

HOSPITALS AND DISPENSARIES

36. For general clinical services, the facilities available are arranged in a three tier structure—

(*a*) Forty-six dispensaries and health centres in the charge of Assistant Medical Officers are located at centres of rural and urban population throughout the Colony.

(*b*) Fourteen rural hospitals, all save one being administered by Assistant Medical Officers, situated at points convenient for the collection of patients requiring treatment either from their local areas, or from outlying dispensaries. In addition to providing out-patient services, these hospitals provide for the in-patient treatment of medical and minor surgical illnesses, obstetric cases and act as casualty clearing posts for the emergency first-aid treatment of those cases needing admission to a larger hospital.

(*c*) Four divisional hospitals, situated at Suva, Lautoka, Labasa and Levuka. These admit patients from their immediate environs, and from the rural hospitals in their divisions if these patients require diagnosis or treatment which are beyond the capabilities of those institutions.

37. There are three specialized hospitals for the treatment respectively of tuberculosis, leprosy and psychiatric illness. Of these, the Tamavua Tuberculosis Hospital and the St. Giles' Mental Hospital are in Suva, whilst the Fiji Leprosy Hospital is situated on the island of Makogai.

38. In addition to hospitals provided by the Government, the Methodist Mission maintains a hospital for women and children at Ba, whilst the Anglican Diocese maintains a small cottage hospital at Wailoku near Suva.

39. The District Nurses in rural areas, at some 120 Nursing Stations, provide clinical services in the fields of domiciliary midwifery and infant welfare. Each nurse has a defined area in which she travels from village to village holding regular clinics.

40. The rural hospitals vary in size from 52 to 8 beds. The hospitals at Rotuma, Savusavu and Taveuni are equipped with simple X-ray equipment; during 1964, an X-ray set purchased with funds raised by the Ba Junior Chamber of Commerce was installed at the Nailaga Rural Hospital near Ba. These hospitals have nurse/radiographers on their staff, who have been given an intensive course in simple X-ray techniques. The policy of providing these basic X-ray facilities has proved successful and it is proposed to expand the scheme. It has taken some of the load of simple radiography from the overworked departments of the larger hospitals.

41. Of the four divisional hospitals, the Colonial War Memorial Hospital in Suva is the specialist centre for the Colony. The specialist staff comprises a Physician, Surgeon, Obstetrican/Gynaecologist, Anaesthetist, Radiologist and Ophthalmologist. The Colony's Central Laboratory and main Dental Unit, under the charge respectively of the Pathologist and the Senior Dental Officer are situated within the precincts of the hospital. The hospital also functions as a training centre for medical and nursing students. A very high standard of work was maintained, and some minor improvements to facilities were made during 1964.

42. Work on the new Out-Patients and Operating Theatre Block at the hospital continued throughout the year and was still in progress at its end.

43. The hospital at Lautoka is the second largest in the Colony, and serves the Western Division. A Surgeon Specialist is stationed there, along with a full staff of Medical and Assistant Medical Officers.

44. The Lautoka Hospital, despite considerable alterations over the last few years remains overcrowded, uneconomical and difficult to run. Approval of a Colonial Development and Welfare Grant to cover 90 per cent of the cost of designing a new hospital was obtained during the year, and planning of this unit, which had been commenced in 1962, continued at a more rapid rate. Following the completion of a preliminary sketch design and of accommodation and equipment schedules, the Public Works Department Architect concerned with the scheme was seconded to London in the middle of the year to work with the Architects engaged on the completion of planning.

45. A Surgeon was stationed at Labasa Hospital for the whole of 1964, and as a result there has been a welcome increase in the amount of surgery performed at that hospital, and fewer cases have had to be sent to Suva for treatment. The new X-ray equipment provided by the Trustees of the War Memorial Anti-Tuberculosis Trust Fund was commissioned in 1964, and this has provided a much needed improvement to the hospital facilities available on Vanua Levu.

46. Levuka Hospital, the smallest of the divisional hospitals continued to function satisfactorily during the year.

47. There is provision, in the hospital services, for a wide range of specialist advice and treatment. Each of the graded specialists at the Colonial War Memorial Hospital is assisted by one or more locally qualified graduates who act as Senior Registrars and Registrars. Similarly, the Surgeon Specialist at Lautoka and the Surgeon at Labasa each have their own unit teams.

48. These local graduates, after a period of general duties designed to give them a broad clinical outlook, are attached to one of the Specialist Officers for a period of training as Junior Registrars. This is followed by intensive post-graduate training at an overseas institution. Much valuable assistance has been given to Fiji in this regard by the Auckland Hospital Board and the University of Melbourne. This scheme has been largely instrumental in enabling busy specialists to provide a greatly increased range of services for the public.

49. In the field of surgery, it is now possible to carry out in Suva extensive chest and heart surgery—much of which is performed by a local medical officer—and neurosurgery, in addition to the routine work of a general surgical unit.

50. In medicine, 1964 saw the installation of equipment which permits cardiac catheterizations to be carried out; this has proved of value in the investigation, and subsequent treatment, of the considerable amount of heart disease which is present in Fiji.

51. It has now proved possible to increase the number of specialist trained local graduates in hospitals outside Suva. There are anaesthetists and tuberculosis officers at Lautoka and Labasa Hospitals, and obstetricians at Labasa and Koromumu.

52. There is, nevertheless, still a need for more specialist trained staff at all the larger hospitals in the Colony; not only to improve the quality of the services provided, but also to meet with the ever increasing demand for the existing services.

53. The work of the three specialized hospitals is discussed elsewhere in this report.

54. An analysis of the work of the general medical institutions throughout the Colony is given in the tables which follow:—

TABLE V

BEDS AT DIVISIONAL HOSPITALS

Type of Bed	Colonial War Memorial Hospital	Lautoka Hospital	Labasa Hospital	Levuka Hospital	Total
General	131	98	35	14	278
Obstetrics	59	23	13	5	100
Private (General)	42	23	7	4	76
Paediatric	47	45	13	9	114
Tuberculosis	....	33	32	8	73
Total ..	279	222	100	40	641

BEDS AT RURAL HOSPITALS

Rural Hospitals	375
Ba Methodist Mission Hospital	51

TABLE VI

HOSPITAL ADMISSIONS BY RACE

Race	C.W.M. Hospital	Lautoka Hospital	Labasa Hospital	Levuka Hospital	14 Rural Hospitals	Total
Fijians	3,752	1,383	513	588	6,134	12,370
Indians	3,994	4,341	2,527	111	4,819	15,792
Others	1,550	366	109	166	1,035	3,226
Totals ..	9,296	6,090	3,149	865	11,988	31,388

TABLE VII
HOSPITAL UTILIZATION

Hospital	Daily Average Bed State	Occupancy Rate	Average Length Stay (days)
Colonial War Memorial Hospital . .	242	0·87	9·5
Lautoka	177	0·80	10·6
Labasa	79	0·79	9·3
Levuka	23	0·59	9·9
Fourteen Rural Hospitals . .	208	0·55	6·2

TABLE VIII
OUT-PATIENTS SEEN AT GENERAL HOSPITALS AND DISPENSARIES

Race	C.W.M. Hospital	Lautoka Hospital	Labasa Hospital	Levuka Hospital	14 Rural Hospitals	46 Rural Dispensaries	Total
Fijians	46,280	16,251	5,191	8,206	53,274	148,920	278,122
Indians	76,045	61,484	53,882	2,796	101,803	159,143	455,153
Others	32,336	2,463	972	3,112	10,938	25,534	75,355
Totals . .	154,661	80,198	60,045	14,114	166,015	333,597	808,630

55. There has been an increase of 11·1 per cent in the number of patients admitted to the Colony's hospitals, the total being 31,388 as compared with 28,237 in 1963.

56. The overall daily average number of patients, occupancy rates and average lengths of stay are given in Table VII. The occupancy rate for the Colonial War Memorial Hospital is, to some extent, artificially lowered by the relatively low occupancy of the private general and obstetric wards. The rate for the medical wards is, in fact, 1·03, whilst that for the surgical wards is 0·91. Both these rates—and indeed the overall occupancy rate are too high for safety, and indicate an urgent need for extra beds to be made available.

57. In the case of the rural hospitals, on the other hand, some occupancy rates are so low as to be uneconomic (see Appendix II), even bearing in mind the fact that these rates are bound to be low in a small hospital if there is to be sufficient room for manoeuvre. Undoubtedly, in a country like Fiji, which is an archipelago many of whose islands have only small populations, it is necessary to provide hospitals for population groups which would not, on a larger land mass, warrant it.

58. Sixteen thousand, nine hundred and eighty-nine children were born in Fiji in 1964. Of these, 8,449 were born in hospital, and a further 2,154 were delivered by district nurses. Thus, 62·4 per cent of births were attended by qualified personnel, a figure which compares very favourably with other developing countries.

59. Table IX gives some details of the work of the maternity units at the Colonial War Memorial, Lautoka and Labasa Hospitals.

60. It will be noted that, of 6,914 women who attended ante-natal clinics at the major hospitals for the first time, 1,540 were lost sight of and not subsequently delivered in hospital. It is likely that some of these were subsequently delivered, either at rural hospitals, or by district nurses; also, in a country with relatively poor communications, there will be women who have not time to reach hospital when labour does start; however, this figure must give some cause for concern.

61. The figures for pre-eclamptic toxaemia and for eclampsia show clearly the difference in incidence between the Fijian and Indian patients—the rates per thousand deliveries being respectively 34·8 and 89·7.

TABLE IX
OBSTETRIC WARDS COLONIAL WAR MEMORIAL, LAUTOKA AND LABASA HOSPITALS

	European	*Fijian*	*Indian*	*Others*	*Total*
Ante-Natal Clinic—					
First visits	51	1,839	4,658	366	6,914
Return visits	208	7,816	22,452	1,547	32,023
Total . .	259	9,655	27,110	1,913	38,937
Mothers—					
Admissions	120	1,582	4,449	464	6,615
Deaths	....	3	7	1	11
Confinements—					
Normal	83	998	2,094	293	3,468
Abnormal (includes abnormal pregnancy, labour or puerperium)	39	438	1,305	124	1,906
Total (No. of women delivered)	122	1,436	3,399	417	5,374

	European	*Fijian*	*Indian*	*Others*	*Total*
Infants—					
Live births	122	1,446	3,266	412	5,246
Still-births	2	17	169	7	195
Neonatal deaths	1	19	112	4	136
Multiple births (3 sets triplets)	2	25	36	2	65
Total number of infants born	124	1,463	3,435	419	5,441
Complications of Pregnancy—					
Pre-eclamptic toxaemia	6	48	288	18	360
Eclampsia	1	2	22	1	26
Complications of Labour—					
Ante-partum haemorrhage	....	28	93	14	135
(*a*) Placenta praevia	....	6	10	5	21
(*b*) Accidental	....	5	40	2	47
(*c*) Unknown	....	17	43	7	67
Forceps	10	44	100	15	169
Caesarean section	4	26	73	11	114
Complications of Puerperium—					
Puerperal pyrexia	1	32	110	9	152

62. There has also been a marked increase in the number of out-patients seen, the figure of 808,630 being an increase of 17·3 per cent over the 1963 total of 689,187. The biggest increase in the number of out-patients was at Labasa Hospital, where 69 per cent more patients were seen in 1964 than in the preceding year.

63. The Health Centres and dispensaries show a very wide range of attendance, varying from 831 at Laselevu to 64,728 at Vatukoula. The full list of these attendances is given at Appendix II. Many rural dispensaries were sited years ago, and the various factors governing the choice of a specific site at that time may no longer be valid; for this reason, a start has been made in reappraising sites as plans for replacement mature. However, the number of attendances at a particular dispensary is by no means the only factor to be considered; for Assistant Medical Officers in rural areas have considerable responsibilities in the field of public health in addition to their clinical duties. There is also the emergency aspect, inherent in all medical work, to be considered.

64. No discussion of emergency clinical services in the Colony would be complete without reference to the work of the Royal New Zealand Air Force. During 1964, it was necessary to ask on fourteen occasions for assistance in the evacuation of seriously ill patients from outlying islands in the group. As always, these requests were answered promptly and willingly on each occasion that operational considerations allowed. The Colony owes an incalculable debt to the Royal New Zealand Air Force for the assistance which has always been forthcoming in this regard. Since 1959 they have been responsible for arranging the emergency transport of no fewer than 71 patients. Tribute should also be paid to Messrs. Morris Hedstrom Limited, whose ships gave assistance in this work, without charge, on several occasions during 1964.

LABORATORIES

65. The Central Laboratory in Suva is under the control of the Pathologist, who also maintains a technical oversight of the branch laboratories at the Tamavua, Lautoka and Labasa Hospitals. This unit, which serves as the laboratory for the Colonial War Memorial Hospital, receives specimens from medical units throughout the Colony as well as from territories within the South Pacific Health Service.

66. A wide range of investigations is carried out and, apart from virology, there are few occasions when help from larger centres is necessary.

67. The Pathologist is responsible for most of the medico-legal work of the Colony, as well as for supervising the instruction of students taking the Laboratory Technicians Course and for teaching Pathology, Bacteriology and Forensic Medicine to the medical and dental students at the Fiji School of Medicine.

68. There has been, as will be seen from the table, the usual annual increase in work carried out at the Colony's Laboratories—

CENTRAL LABORATORY, SUVA

1. Histology	1,615	
		1,615
2. Haematology—		
Routine blood counts	19,757	
Blood grouping	6,292	
Pre-Transfusion cross matching	2,327	
Donors bled for transfusion	1,730	
Marrow smears	110	
		30,216

3. Seminal Fluid—		
Examination for fertility	107	
		107
4. Parasitology—		
Faeces—Microscopic	4,570	
Blood—Malaria and Microfilariae	118	
		4,688
5. Bacteriology—		
Routine, Microscopic and Culture	9,190	
Drinking water supplies	634	
Sea bath water	43	
Other foodstuffs	10	
		9,877
6. Serology—		
Kahn reaction	1,749	
Agglutination tests	61	
		1,810
7. Vaccine Prepared—		
T.A.B. 50cc. bottles	813	
		813
8. Biochemistry—		
Routine examinations	5,163	
		5,163
9. Animal Inoculations—		
Toads for pregnancy tests	95	
		95
10. Forensic Medicine—		
Clothing, weapons, etc.	867	
		867
11. Post Mortem Examinations—		
Police	84	
Colonial War Memorial Hospital	76	
Maternity Annexe	12	
Tamavua Tuberculosis Hospital	7	
		179
		55,430

BRANCH LABORATORY, LAUTOKA

1. Haematology—		
Routine blood counts		11,031
Pre-Transfusion and cross matching		1,197
Blood grouping		4,633
Donors bled for transfusion		1,127
2. Parasitology—		
Faeces—Microscopic		1,668
3. Blood—		
Microfiliariae and Malaria		30
4. Bacteriology—		
Routine Microscopic and Cultures		3,988
5. Biochemistry—		
Routine Examinations		1,620
6. Post Mortem Examinations—		
Police	21	
Hospital	33	
		54
		25,348

BRANCH LABORATORY, LABASA

1. Haematology—	
Routine blood counts	3,952
Blood grouping	2,978
Pre-Transfusion and cross matching	642
Donors bled for transfusion	580
2. Parasitology—	
Faeces—Microscopic	421
3. Bacteriology—	
Routine Microscopic and Cultures	1,752
4. Animal Inoculation—	
Toads for pregnancy tests	98
5. Biochemistry—	
Routine Examinations	285
6. Seminal Fluid—	
Examinations for fertility	5
	10,713

69. Towards the end of 1964, a start was made on the building of a Virological Research Laboratory in Suva. The capital funds for this are being provided by the Wellcome Trust, whilst recurrent expenses are provided jointly by the Tropical Medicine Research Board, the University of Otago (whose Microbiology Department will provide the staff) and the Fiji Government. Construction work was continuing at the end of the year, and the laboratory was expected to become operational in early 1965.

PSYCHIATRIC SERVICES

70. Two incidents of significance to the St. Giles' Hospital and the future of psychiatric facilities as a whole occurred during 1964. The first of these was the recruitment, late in the year, of a full-time Psychiatrist. Although there have been periods in the past when Medical Officers with post-graduate training in psychiatry have been available to the Department, it has not previously been possible for their specialist services to be thus used on a full-time basis.

71. The second was the passing by the Legislative Council of the Mental Treatment (Amendment) Ordinance, 1964. It is now possible to admit truly voluntary patients to the Colony's one institution where specialist medical and nursing facilities for the treatment of mental illness are available.

72. There was a rise in the number of admissions from 170 in 1963 to 185 in 1964 and this was accompanied by an insignificant rise in the number of discharges from hospital to 194. Despite this, however, the average daily number of patients fell from 114 to 109. This is a reflection of the active treatment policy followed in the hospital, which resulted in a fall from 151·9 days to 139·4 days in the average length of stay. This figure is, of course, weighted by the number of long-stay chronic patients in the hospital (of which every mental hospital has its quota) and a clearer picture is, perhaps, provided by Table XIII which analyses the numbers of patients by length of stay. From this it will be seen that there has been a dramatic fall in the last five years in the number of patients with from 1–3 years of hospitalization.

73. It will be noted that, as in 1963, there is an excess of re-admissions over first admissions. The possible reasons for this are complex; it may be due to new spells of illness; it may be the result of deficiencies in the after-care organization; it may be the result of deliberate policy and, to some extent, a contrast with past policies which leaned too far the other way. A prospective study of this is being undertaken.

74. Some further rehabilitation of the hospital buildings was carried out during 1964.

TABLE X

Relating to patient movements:—	
In hospital at 31st December, 1963	108
Admitted during 1964	185
Departed during 1964	194
In Hospital at 31st December, 1964	99
Total under care 1964	293

TABLE XI

Relating to days of care and use of beds:—	
Patient-days in 1964	3,980
Average daily number	108·9
Number of beds	108
Average bed-occupancy	100·8
Number of admissions	185
Average length of stay	139·4 days

TABLE XII

ADMISSIONS AND DEPARTURES—TYPE, SEX AND RACIAL ORIGIN

	Fijian		Indian		Others		Totals	
	M	F	M	F	M	F	M	F
In hospital at 31st December, 1963	17	9	40	29	10	3	67	41
First admissions 1964	15	10	21	22	2	2	38	34
Re-admissions 1964	12	8	36	48	4	5	52	61
Released on trial 1964	24	25	41	54	4	4	69	83
Discharged 1964	5	0	12	12	4	2	21	14
Died 1964	1	0	2	1	2	1	5	2
In hospital at 31st December, 1964	14	5	42	30	6	2	62	37
Under care 1964	44	27	97	99	16	10	157	136

TABLE XIII

LENGTH OF STAY OF PATIENTS IN RESIDENCE AT 31ST DECEMBER, 1964

Years	1960		1961		1962		1963		1964	
	M	F	M	F	M	F	M	F	M	F
0—1 . ..	32	31	29	17	30	20	22	19	23	19
1—2	12	20	6	6	5	4	4	1	3	..
2—3	13	5	5	4	6	2	4	2	3	..
More	68	54	55	31	41	23	37	19	33	18

TABLE XIV

OUT-PATIENTS AND AFTER-CARE

	Fijian	Indian	Others	Total
Out-patients seen—				
1963	171	866	228	1,265
1964	296	932	214	1,442
Absent on trial—				
31st December, 1963 ..	164	369	77	610
31st December, 1964 ..	184	384	74	642

DENTAL SERVICES

75. A developing country such as Fiji, with limited resources, cannot afford the close dental cover which is regarded as normal in more advanced countries of the world. It is therefore the Department's policy to provide as much conservative treatment for children as is possible, and to limit the treatment of adults to the relief of pain and to the provision of specialized facilities such as oral surgery; and to the provision of complete dentures for those edentulous patients who are unable to afford the services of private practitioners.

76. In order to carry out this policy, it is important to provide as much mobility as possible for the dental staff. In addition to the large mobile dental clinic already operated by the Department, two light mobile clinics were delivered during the year. These clinics enable dental services to be taken into the rural areas, and more especially, to those schools which take part in the " tooth-brushing " scheme.

77. This scheme, which was started some years ago has enabled many schools in Fiji to ensure that all their pupils brush their teeth at least once a day. With the co-operation of the manufacturers, large quantities of toothbrushes are purchased at the low price of 3d. and are sold, to schools taking part in the scheme, at cost. Cabinets for these brushes are made by the Prisons Department and sold to participating schools at cost price. The aim of this project is to have every school child in Fiji brushing his teeth daily.

78. As mobile clinics visit schools for treatment purposes, dental health education talks are given and specially designed teaching charts were distributed to all schools in 1964.

TABLE XV

ATTENDANCES

	Suva	Lautoka	Ba	Labasa	Mobile	Tours	Total
Adults	15,106	4,285	3,621	3,974	30	59	27,075
Children	14,681	13,152	2,868	6,292	5,299	518	42,810
Total ..	29,787	17,437	6,489	10,266	5,329	577	69,885

TABLE XVI

WORK CARRIED OUT

	Suva	Lautoka	Ba	Labasa	Mobile	Tours	Total
Fillings	9,758	4,135	728	1,853	5,117	112	21,703
Scalings	872	266	147	282	206	39	1,812
Extractions	19,069	12,319	6,023	10,679	4,899	794	53,783
Surgical Operations	61	14	....	1	....	....	76
General Anaesthetics	13	2	....	1	....	....	16
Fixations of Fractured Mandibles ..	34	30	....	2	....	....	66
Schools visited	....	31	14	83	83	4	215
Revenue ..	£3,809	£1,205	£876	£1,083	....	....	£6,973

79. In addition 458 orthodontic treatments were carried out and 420 dentures were constructed at the Suva Clinic.

IV—PUBLIC HEALTH

NOTIFIABLE DISEASES

80. The trend of certain notifiable diseases over the last five years is given below—

TABLE XVII

NOTIFIABLE DISEASES

	1960	1961	1962	1963	1964
Cerebro-Spinal Meningitis	11	8	5	4	26*
Diphtheria	9	6	4	3	1
Dysentery (all types) ..	203	360	494	195	129
Enteric Group	5	8	5	2	....
Infantile Diarrhoea ..	3,295	3,538	3,347	3,215	4,748
Infective Hepatitis ..	206	215	191	410	293
Influenza	13,030	12,163	56,282	23,765	45,915
Measles	465	98	17	2,989	4,386
Poliomyelitis	....	15	2	....	....
Tetanus	41	52	40	48	48
Trachoma	172	175	1,415	808	380
Tuberculosis (all forms)† ..	648	566	560	529	516
Pertussis	509	741	2,041	1,627	893
Leprosy†	39	44	36	41	29
Syphilis	2	11	16	30	25
Gonorrhoea	380	227	316	445	455
Yaws	26	30	13	21	37
Dengue Fever	5	19	39	1	....

NOTES

* The figure for 1964 includes all types of meningitis except tuberculous.

† These figures are obtained from the Central Registry and not from notification records as those from the Registry are considered to be more accurate. A full table of all notifiable diseases is given at Appendix III. Certain of the diseases listed deserve special mention:—

81. *Intestinal Diseases*—For the first time for many years no case of the enteric group of diseases was notified. This is, perhaps, the more surprising since no major campaign of typhoid immunization has been undertaken. Following the floods of March, 1964, people living in the worst affected areas were immunized and it may be that this was of help, since these areas include those that are normally the site of origin of these cases. It is thought too, that the flooding may have contributed to the rise in the incidence of infantile diarrhoea; there was a sharp rise in notifications of this disease in March, April and May.

82. *Influenza*—1964 saw another peak in notifications of this syndrome; the term is used advisedly, since there is evidence that much of what is notified as influenza is due to viruses of other types. An examination of the notifications of influenza over the past 15 years, reveals that, with the exception of the year 1954, notifications remained fairly constant until 1957, when there was a marked rise to about 12,000 cases. Since then, the level has remained high, with peaks in 1962 and 1964.

TABLE XVIII

ANNUAL NOTIFICATIONS OF INFLUENZA

1950	5,293	1955	5,437	1960	13,030
1951	3,280	1956	5,710	1961	12,163
1952	4,778	1957	12,190	1962	56,282
1953	3,179	1958	11,626	1963	23,765
1954	8,492	1959	20,041	1964	45,915

83. A breakdown of notifications by months, over the period 1959–1964 shows that there is a fairly constant level of notifications throughout the year, but that peaks occur lasting for 2–3 months. It is thought that the "background level" is accounted for by other virus infections, whilst the peaks represent the influenza epidemics.

84. Preliminary studies by the Microbiology Department of the University of Otago indicate that there is a considerable arthropod-borne virus problem in Fiji, and it is thought that this may account for the continuous level of infection that exists. It is thought that the research programme to be undertaken by the University (mentioned in paragraph 69 above) will do much to elucidate this problem.

85. *Measles*—The epidemic which started late in 1963 continued into the new year, and finally tailed off in June/July. Although there now appears to be sufficient level of herd immunity in Fiji to prevent an undue mortality from this disease, the epidemic duration is still of the "primitive" type and would seem to indicate that a fairly high proportion of the child population have only a low level of immunity; some of the pattern may, however, be the result of slow communications.

86. *Tetanus*—There was no change in the reported incidence of tetanus. Analysis of the cases into four age groups gives the following result:—

Age Group	*No. of Cases*
Neonatal	25
Pre-school	3
School age (5–15)	8
Adults	12
	48

87. Of the neonatal cases, nine came from the Sigatoka area, four each from the Ba and Labasa areas and three from the Savusavu area. Although the feasibility of immunizing all women attending ante-natal clinics is under consideration, it is thought that this is not wholly justifiable, since there is reason to believe that the mothers of these children have not attended such clinics. With the present mass immunization campaign amongst children, it should be possible to reduce the figures in the two middle groups and, later, in the adult age group. For the future, all cases of neonatal tetanus are to be investigated in order to determine the cause of infection and to take such steps as may be necessary to improve techniques.

88. *Venereal Diseases*—There has been a further small rise in the incidence of gonorrhoea. Although much care and effort is taken to establish the identity of contacts, the efforts of the Department to improve this picture are hampered by the difficulty experienced in obtaining reliable information. Either the patient is unaware of the true name of the contact or, if the name is known, a sense of misguided loyalty prevails. There can be little doubt, however, that this group of diseases constitutes a grave problem which deserves increasing attention, from everyone concerned with social welfare.

89. *Food Poisoning*—Five outbreaks of chemical food poisoning occurred in the period September–November, 1964. There were 23 cases, with one death—a child of five. In four, the cause was found to be the contamination of sharps, and in the fifth flour, by an organo-phosphorus insecticide. Through the courtesy of the Government Chemist in London, this was identified as phorate (O, O-diethyl-S-(Ethylthiomethyl) phosphorodithioate). The contaminated foodstuff had been imported from Sydney, and investigations showed that the most likely cause was spillage of liquid over the bags containing the sharps. Careful inquiry, both in Fiji and in Australia, where much help was freely given by the New South Wales Health Department and the New South Wales and Victoria Police, has so far failed to provide an explanation of how this contamination could have occurred.

IMMUNIZATION CAMPAIGN

90. For some time past, despite the use of D.P.T. antigen by Maternal and Child Health personnel, concern has been felt at the level of immunity to several communicable diseases among the Colony's child population. It was known that many children had been born since the original B.C.G. Campaign, and it was felt that the arrangements for the protection of infants with B.C.G. vaccination were not sufficiently well organized.

91. No large scale action had been taken to immunize against poliomyelitis, and, after an interval of six years since the last outbreak of this disease, there was every chance that the general level of immunity in the population was dangerously low.

92. It was therefore decided to mount a full scale immunization campaign. A start was made in 1963, with the immunization of school children, using trivalent oral poliomyelitis vaccine and tetanus toxoid. Following its successful completion, the campaign was aimed, in 1964, at the pre-school population with the objective of immunizing them against tuberculosis, poliomyelitis, diphtheria, pertussis and tetanus.

93. The plan has been to give all children under the age of 5, B.C.G., two doses of Sabin type oral poliomyelitis vaccine and three doses of triple antigen. In order to avoid additional visits, preliminary tuberculin testing was omitted; if a child had no obvious scar, B.C.G. was to be given.

94. It had at first been thought that it would be necessary to make a small charge for this service, but the World Health Organization and United Nations Children's Fund generously agreed to provide, not only all the triple antigen required for the campaign, but also refrigerators for vaccine storage and insulated containers for transport in the field; it was thus possible to omit any charge.

95. The intention was to start the campaign in April, by which time all supplies were available; but following the floods, it was decided to defer the starting date until June in order not to interfere with the immediate problems of rehabilitation.

96. Results up to the end of the year are given below—

TABLE XIX

IMMUNIZATION CAMPAIGN

Division	B.C.G.	Sabin 1	Sabin 2	D.P.T. 1	D.P.T. 2	D.P.T. 3	Tetanus Toxoid	Total	Completed
Northern	9,300	9,419	6,812	6,381	4,412	1,094	3,685	41,103	2,231
Eastern	7,959	11,701	9,932	7,861	3,111	....	7,268	47,832	....
Central	9,755	17,403	12,534	11,713	8,949	5,471	11,762	77,587	5,471
Western	13,734	18,293	15,613	10,381	6,361	1,061	27,060	92,503	2,011
Total ..	40,748	56,816	44,891	36,336	22,833	7,626	49,775	259,025	9,713

97. The relatively high figure for doses of tetanus toxoid is due to two factors; firstly, the completion of the 1963 campaign amongst school children, secondly, the fact that, in those cases where a child was known to have been previously immunized with D.P.T., tetanus toxoid was given as a booster dose.

98. It will be noted that it was not possible to complete any courses in the Eastern Division. Severe difficulties were experienced in obtaining adequate sea transport in this division; it is planned to complete this in early 1965 when the Department's new vessel is in commission.

VITAL STATISTICS

99. Details of vital statistics, supplied by the Registrar-General are given at Appendix IV.

100. The crude birth rate was again slightly lower, at 37·22 per thousand (Fijians 36·82; Indians 39·16).

101. The crude death rate was slightly higher at 5·96 per thousand (Fijians 6·66; Indians 5·50). The overall infant mortality rate was 30·49 per 1,000 live births; for Fijians 27·84 per 1,000 live births and for Indians 32·67 per 1,000 live births.

102. Although the infant mortality rates for both the main racial groups in the Colony are slightly higher than in 1963, they are both still quite satisfactory. It will be noted that the rate for Fijians is still lower than that for Indians.

103. Although the notification of births and deaths is considered to be reasonably complete, the same cannot be said of the medical certification of deaths. An investigation of this problem was carried out in co-operation with the Registrar-General's Department. The records of 1,359 deaths were examined (696 Fijian; 663 Indian). Of the Fijian deaths notified 33·4 per cent had been medically certified; for Indians the corresponding figure is 57·5 per cent.

FAMILY PLANNING

104. The need for family planning services to be made easily available has for some years been recognized by the Medical Department, but a variety of factors militated against its full scale development. Three important events in 1963 enabled us to operate on a much wider scale in 1964 than previously. These were, firstly, the acceptance, by Government, of family planning as a definite part of its policy of social services. Secondly, the formation of the Family Planning Association of Fiji and the provision, by the Legislature, of additional funds for family planning work.

105. The Family Planning Association has undertaken to be responsible for the dissemination of information about family planning—its desirability and purpose; the commonly used methods, and the facilities available in Fiji. The Medical Department is responsible for providing the service. At the end of the year, advice on family planning and supplies of materials were available at all Government hospitals, health centres and dispensaries, and health offices. Arrangements were also well in hand for making these services available at most district nursing stations.

106. Advice is available regarding all methods of family planning and the patient is given a free choice of method. The most commonly used are the condom and the oral tablet. A small charge is made for materials supplied.

107. Following a trial in Suva, it was decided to use the Lippes intrauterine loop as widely as possible, and the training of staff in its insertion was begun. This method has the advantage, in an unsophisticated society, that the patient is freed from the necessity of taking tablets, and there is no recurring cost to be met.

TABLE XX

ATTENDANCES AT FAMILY PLANNING CLINICS

Station	*First Visits*	*Return Visits*	*Total*
Northern Division	721	1,513	2,234
Central Division	409	1,012	1,421
Eastern Division	104	223	327
Western Division	1,886	3,075	4,961
Colonial War Memorial Hospital	1,212	7,929	9,141
Total ..	4,332	13,752	18,084

108. It will be noted that the Colonial War Memorial Hospital has a much high proportion of return visits than is seen elsewhere. This is due to two factors; firstly, the conduct of two trials has necessitated the frequent recall of patients; secondly, in the less urbanized areas there is a tendency for patients to obtain three or four months supplies of materials at one visit in order to avoid unnecessary travelling.

109. In addition to these patients 425 patients were sterilized during the year at their own request or for clinical reasons.

110. In all, and taking into account sales of contraceptives by private pharmacists, it is estimated that some 6,500 patients are protected by family planning methods.

111. It is, as yet, too early to say just how effective this campaign is in terms of a reduction in the natural increase of the population but preliminary estimates are encouraging.

TUBERCULOSIS

112. There can be little doubt that tuberculosis is the main single cause of morbidity and loss of earning power in Fiji. Nevertheless, there was a further welcome fall in the number of new cases registered in 1964, the figure being 516. The recorded incidence of the disease has fallen from 2·09 per thousand of the population in 1955, to 1·13 per thousand in 1964. Figures for the past five years are—

TABLE XXI

INCIDENCE OF TUBERCULOSIS

Year	*New Cases Registered*	*Population 1st December*	*Rate per* 1,000
1960	648	401,018	1·62
1961	564	413,827	1·36
1962	560	427,851	1·31
1963	529	441,301	1·19
1964	516	456,390	1·13

113. In comparing the figures given above with those of other countries, it must be remembered that criteria for the registration of tuberculosis vary. For example, in many countries, only those cases which are bacteriologically positive are registered as tuberculosis. Were these criteria used in Fiji, only 43·4 per cent of the 516 would have been registered. The criteria for registration in Fiji are that there should be—

(i) A positive tuberculin test.

(ii) The presence of a demonstrable lesion in some part of the body whose appearances are characteristic of a tuberculous lesion.

(iii) A necessity to subject the patient to some form of interference with his or her daily life.

114. It will be seen therefore that the net is spread wide, and lesions which might not warrant registration in many areas are here regarded as tuberculous.

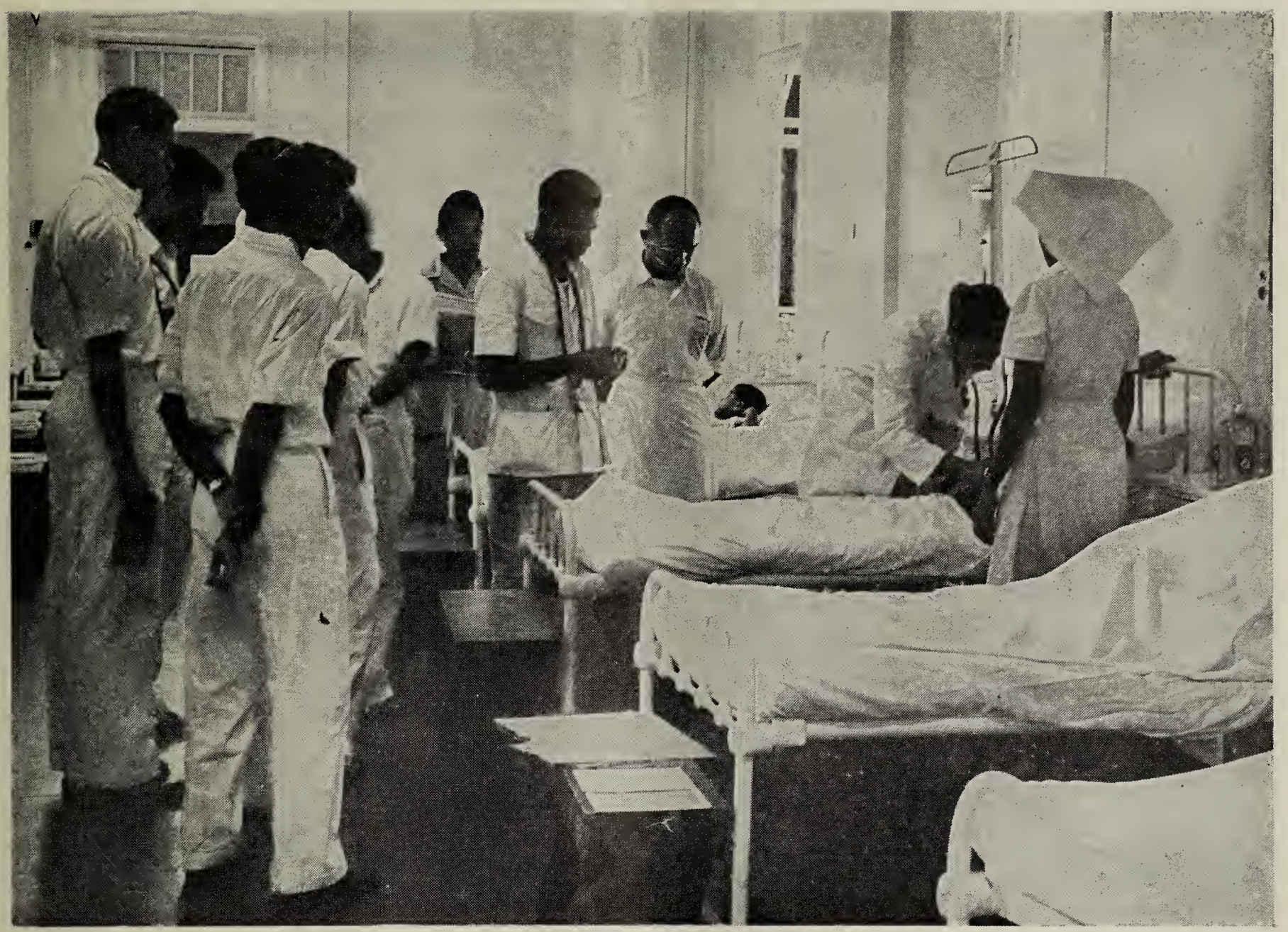
115. An analysis of new cases registered in 1964 reveals that, as in the past, the toll of this disease is felt most by the Fijian population—

TABLE XXII

CASES OF TUBERCULOSIS FIRST REGISTERED IN 1964

Age Group	0–4	5–14	15–24	25–34	35–44	45–59	60+	Total	Per cent of total registration	Population 31st Dec. 1964	Rate per 1,000
Fijian:—											
Male	26	20	48	29	29	33	21	206	76·3	189,169	2·1
Female	15	21	47	52	20	30	3	188			
Indians—											
Male	4	2	5	16	2	14	5	48	14·9	228,176	0·3
Female	1	3	6	9	3	4	3	29			
Europeans—											
Male	....	....	....	....	1	....	....	1	0·4	10,831	0·2
Female	....	....	....	1	....	....	....	1			
Part-Europeans—											
Male	....	....	....	....	1	1	1	3	1·2	9,803	0·6
Female	....	1	1	....	1	....	....	3			
Total	46	47	107	107	57	82	33	479			

116. Although there has been a steady fall in the number of new cases reported annually in the 5–14-year age group over the last five years (almost certainly the result of the B.C.G. Campaign of 1958–1963) there has been a disturbing rise in the 0–4-year group in 1964. This indicates the need for increased B.C.G. vaccination in order to cover the backlog of children born since the original B.C.G. Campaign was carried out in their areas.



A clinical class at the Colonial War Memorial Hospital

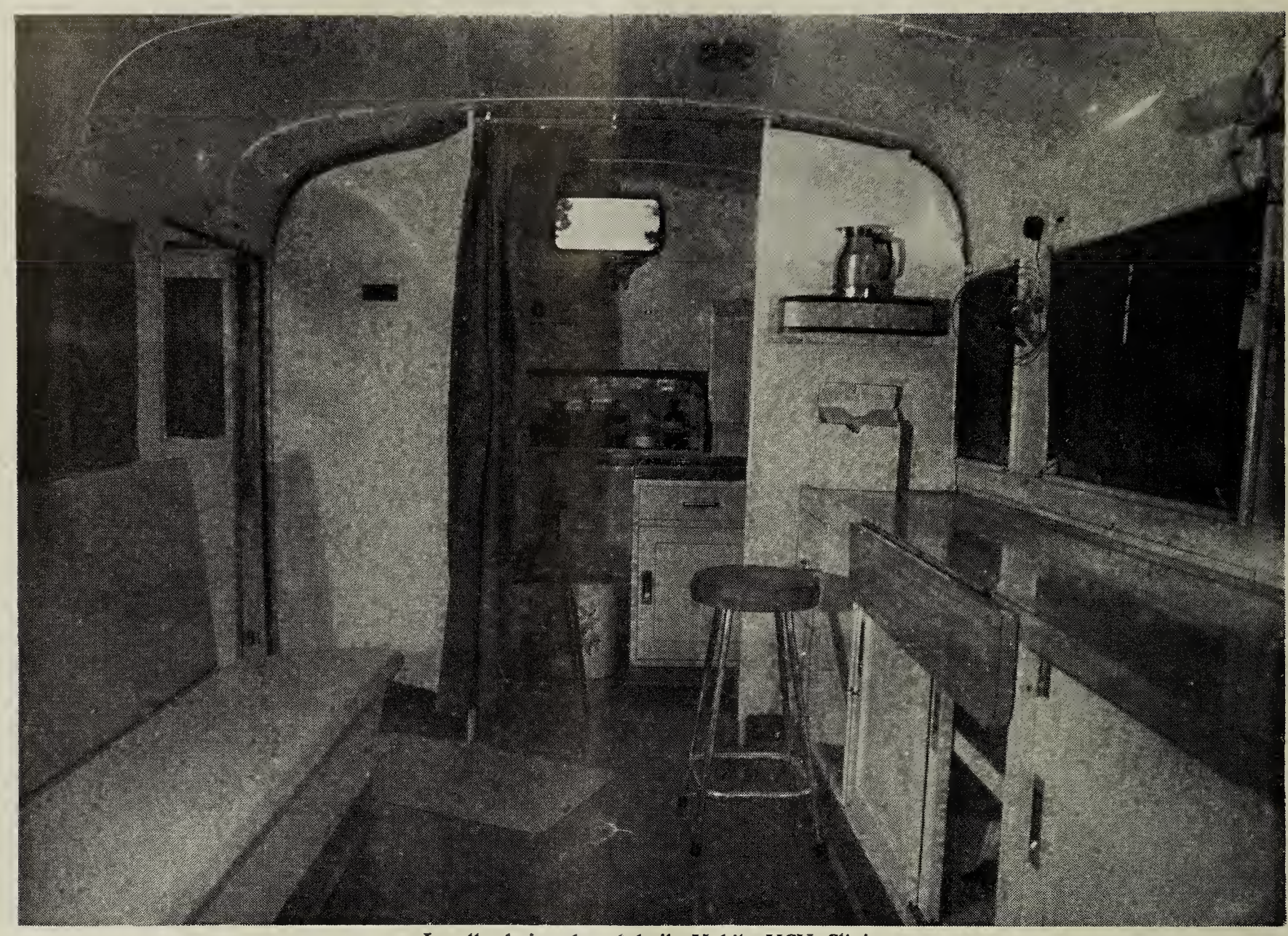
New out-patients' and operating theatre block, Colonial War Memorial Hospital

Public Health Nursing Class

Locally-designed and built Mobile Dental Clinic

Grade I Rural Health Centre

Nuffield Department of Social and Preventive Medicine



Locally-designed and built Mobile MCH Clinic

Mobile Mass Miniature X-Ray Unit

117. The problem of case-finding is always difficult in a country of low population density and difficult communications. For this reason, much reliance is placed upon the efforts of Assistant Medical Officers in rural hospitals and dispensaries to examine contacts of known cases and upon the mass radiology of contacts. The success of these efforts is shown in the table below which gives the various points at which new patients first came to notice—

TABLE XXIII

	1963		1964	
	No.	*Per Cent*	*No.*	*Per Cent*
Rural Hospitals and Dispensaries	180	34·02	231	44·7
Mobile Mass Miniature X-ray Unit . ..	117	22·10	81	15·7
Colonial War Memorial Hospital	108	20·40	96	18·6
Three Divisional Hospitals	64	12·09	72	14·0
Tamavua Hospital	32	6·04	17	3·3
Private Practitioners	28	5·29	19	3·7

118. During 1964, the mobile mass miniature unit took 16,820 films, and was mainly used for the X-ray of contacts giving a pick-up rate of 4·81 new cases per thousand films. Since the unit was first commissioned it has taken 145,000 films, with a pick-up rate of new, active cases of 6·7 per 1,000.

119. The Tamavua Tuberculosis Hospital is the main centre for the treatment of this disease, and the Medical Superintendent, who is the Colony's Chest Physician, is charged with the general supervision of the clinical care of all cases of tuberculosis. There are also tuberculosis units at the Lautoka and Labasa Hospitals, each under the care of a specialized senior Assistant Medical Officer, who have immediate responsibility for the treatment of tuberculosis in their divisions, and who are able to refer cases requiring specialist opinion to Tamavua.

120. In addition, the examination, for review purposes, of cases is undertaken at the Rotuma, Savusavu and Taveuni Hospitals; the data from these examinations being sent to Tamavua for advice as to treatment.

121. The Tamavua Tuberculosis Hospital, with 343 beds, had a daily average number of patients of 334, and an occupancy rate of 0·97. The average length of stay was 226 days. There were 538 admissions during the year, a rise of 30 compared with 1963. Of these, 67 were re-admissions for a variety of reasons. The racial and age/sex groupings of admissions to the hospital follow the pattern of Table XXIV:—

TABLE XXIV

ADMISSIONS AND DISCHARGES BY RACE

Race	*Admissions*	*Discharges*
Fijians	429	381
Indians	54	56
Europeans and Part-Europeans	12	12
Others	43	44
	538	493

TABLE XXV

ADMISSIONS AND DISCHARGES BY AGE AND SEX

Age	Admissions			Discharges		
	Male	Female	Total	Male	Female	Total
0– 9 . ..	72	27	99	33	26	59
10–19 . ..	51	39	90	39	24	63
20–29 . ..	49	55	104	57	63	120
30–39 . ..	53	37	90	53	39	92
40–49 . ..	38	31	69	37	32	69
50–59 . ..	25	27	52	37	19	56
60–69 . ..	14	11	25	27	6	33
70–+ . ..	6	3	9	....	1	1
Total ..	308	230	538	283	210	493

122. The number of beds available for the treatment of tuberculosis is such that all newly diagnosed cases can be admitted to hospital, for a period of in-patient treatment, without delays due to waiting lists. The practice is to admit every patient for a period of at least two months; during this time, the usual treatment is Streptomycin Isoniazide and P.A.S. in a combined regime. After discharge from hospital, patients are referred to their nearest hospital or dispensary for domiciliary treatment. The regime used is a compound tablet of I.N.A.H. and P.A.S. in a dose of 330 mgms. I.N.A.H., and 12 gms. P.A.S. daily. Patients attend once a month for clinical follow-up, and for full review including radiology at intervals which vary from three months shortly after discharge to six, and later twelve months, when the patient's condition warrants it. Active treatment usually continues for a period of one to two years, and periodic review is continued until such time as the lesion is considered to be safely healed. At the end of December, there were 2,800 patients still on the review list, of whom 700 were receiving domiciliary treatment.

LEPROSY

123. The Fiji Leprosy Hospital was established 53 years ago on the island of Makogai, and is run in conjunction with St. Elizabeth's Home in Suva which acts as a staging post for patients proceeding to and from the island and as a centre for the accommodation of discharged patients requiring short-term treatment for one reason or another.

124. A period of treatment in hospital is still obligatory in Fiji. Good hospital facilities are available, and patients undoubtedly benefit from the initial care which they receive there and from their education in living with their disease. They are eligible for absolute discharge from hospital after being clinically and bacteriologically inactive for six months. These patients are then followed-up as out-patients, being given maintenance drug therapy, in the usual way. During their stay in hospital, patients are eligible for leave at home for two weeks each year.

125. It is recognized that some patients have pressing social or economic problems which can only be solved by their return to ordinary life, and provision is therefore made for conditional discharge from the hospital, upon the patient's application. The criteria for this are, firstly, that the patient should be bacteriologically 2+ or less on the Ridley scale; secondly, that the home conditions are such that a reasonable degree of barrier isolation can be maintained. It was necessary to tighten the bacteriological standard for conditional discharge from 3+ to 2+, due to the increasing reactivation rate experienced.

126. The hospital is staffed by a Medical Superintendent and the Missionary Sisters of the Society of Mary and the Sisters of Nazareth. Sisters of the first of these orders staff the St. Elizabeth's Home.

127. Admissions to the hospital over the past five years are as follows:—

TABLE XXVI

	1960	1961	1962	1963	1964
Total Number of Admissions	39*	45	40	40	44
Adults	32	36	35	34	42
Children (under 14)	7	9	5	6	2
Tuberculoid 1	13	9	11	6	8
Tuberculoid 2	7 } 20	5 } 18	5 } 22	4 } 13	1 } 17
Tuberculoid 3	..	4	6	3	8
Lepromatous 1	3	4	2	2	..
Lepromatous 2	11 } 17	13 } 18	6 } 8	.. } 3	8 } 14
Lepromatous 3	3	1	..	1	6
Dimorphous L/T	..	9	7	15	6
Dimorphous T/L	1	..	3	7	4
"Burnt out" cases	..	..	..	2	3

* One case unclassified

128. Of the 44 admissions, 29 were new cases, 12 were reactivated, and 3 were burnt out.

129. The three burnt out cases were admitted for surgical treatment of severe trophic ulcers.

130. There were, on 31/12/64,182 patients under treatment in hospital, made up as follows:—

TABLE XXVII

Fijians		98
Indians		58
Part-Europeans		7
Polynesians and Others		19
	Rotumans	4
	Banabans	2
	Chinese	2
	Tongans	6
	Samoan	1
	Cook Islander	1
	Solomon Islanders	3

131. Table XXVIII shows that leprosy still continues to be a disease affecting the male Fijian, and once more Lau heads the list geographically.

TABLE XXVIII

ADMISSIONS 1964 BY RACE, SEX AND DOMICILE

Province	Male	Female	Total	Fijian	Indian	Rotuman	Banaban	Part-European	Total
Ba	4	2	6	1	5	..	..	..	6
Bua	2	..	2	..	2	..	..	..	2
Cakaudrove	3	..	3	2	1	..	..	..	3
Kadavu	2	..	2	2	..	..	..	..	2
Lau	8	1	9	9	..	..	..	..	9
Macuata	5	1	6	..	6	..	..	..	6
Nadroga	1	..	1	1	..	..	..	..	1
New Zealand	..	1	1	..	..	..	..	1	1
Rabe Island	1	..	1	..	..	..	1	..	1
Rotuma	1	..	1	..	..	1	..	..	1
Suva	6	1	7	..	7	..	..	..	7
Tailevu	4	..	4	4	..	..	..	..	4
Yasawa	..	1	1	1	..	..	..	..	1
Total	37	7	44	20	21	1	1	1	44

132. The treatment of choice in Fiji is D.D.S., with Diphenylthiourea as a second line of defence. Thiacetazone is little used and Etisul has proved unacceptable to the patients. The progress of patients under treatment is given in Table XXIX.

TABLE XXIX

	B.O.	T 1	T 2	T 3	L 1	L 2	L 3	DT/L	DL/T	Total
Improved	..	5	1	6	13	10	8	6	10	59
Stationary	..	2	1	1	26	24	8	7	16	85
Worse	....	....	....	1	1	3	....	....	2	7
Recent Cases	....	3	1	5	1	7	3	1	3	24
Burnt-out Cases	7	....	....	....	....	....	....	....	....	7
Total ..	7	10	3	13	41	44	19	14	31	182

133. Occupational therapy, which plays such a large part in the treatment of leprosy, has always been emphasized at Makogai, and during 1964 this continued at its usual high level.

134. The various ancillary departments of the hospital, physiotherapy, X-ray and Laboratory ably staffed as always by the Nursing Sisters, maintained their valuable services throughout the year.

135. St. Elizabeth's Home, which acts as the patients link with ordinary daily life, was as busy as always. Although the number of transit patients fell, the total number of patients housed in the institution rose from 146 to 182.

136. With the continuing fall in the number of patients in the Makogai Hospital—the daily average fell to 181 during the year—this institution becomes more and more uneconomic to run. With this in mind, preliminary investigations were started during 1964 in order to enable the whole unit to be housed near Suva as soon as funds become available for capital works.

137. No account of leprosy in Fiji would be complete without mention of the continued assistance given by the New Zealand and Fiji Lepers' Trust Boards. As always, this help has, during 1964, been generous and willingly and freely given. The Fiji Board suffered a severe blow with the death of one of its members, Mr. J. Amputch, M.B.E.; he had been a staunch supporter of all the Board's activities for many years and his loss is keenly felt by patients and staff alike.

HEALTH EDUCATION

138. Much of the effort of the Department to improve the Public Health of the Colony will be valueless unless it is possible to involve the public in schemes for improvement, and to foster a sense of interest and a spirit of self-help. This statement may well be trite, but it can bear endless repetition if any real improvement is to be made in conditions in Fiji. Thus, much importance is attached in the Department to the value of Health Education. Much of the time of the Health Education Officer therefore has been taken up with the training of students, both undergraduate and post-graduate in the elements of the discipline, so that as far as possible all the Department's staff are aware of the health education content of all their work.

139. Additionally, and in continuation of past activities, the Health Education Officer held courses for community leaders in five areas of the Lau Group. He was assisted in these by a small team from Medical Headquarters and by the Assistant Medical Officers and Nurses of the area. The participants, who numbered in all 841, were selected by the Fijian Administration and included, apart from officials, traditional chiefs, turaga-ni-koro and representatives of the women in each village.

140. The Health Education Section, in co-operation with the South Pacific Health Service, ran a successful exhibit dealing with nutrition and environmental sanitation at the Fiji Show.

ENVIRONMENTAL SANITATION

141. The Director of Medical Services is *ex-officio* Chairman of the Central Board of Health. The composition of the Board was altered in 1964 by the Public Health (Amendment) Ordinance so that it now has a majority of unofficial members. The Board advises on all health matters and holds executive powers in those areas where there is no Local Authority; it can also exercise such powers should a Local Authority default in its duty.

142. There are in all 25 such Authorities. Of these, 16 are concerned with rural areas, whilst the remainder are responsible for the administration of the city of Suva, the town of Lautoka, the Nadi International Airport, and the townships of Ba, Labasa, Levuka, Nadi, Nausori and Sigatoka.

143. The minutes of the meetings of all Local Authorities are sent to the Board and advice is given by the Board on all matters referred to it.

144. The Local Authorities' staff concerned with environmental sanitation are employed by the Medical Department and are seconded for duty with the Authorities. The exceptions to this are the city of Suva, and the town of Lautoka; the latter employed its own Health Inspector with effect from 1st November, 1964.

145. Mention has been made in previous reports of the problem of environmental sanitation in the rural areas of Fiji. The main facets of this are—

(*a*) a lack of general village planning;
(*b*) the increasing difficulty of building good traditional houses and the lack of a low cost substitute for these;
(*c*) the need to provide water supplies of an acceptable standard;
(*d*) the need for proper refuse and excreta disposal.

146. In an effort to overcome some of these problems, several steps were taken during the year. The scheme of posting Assistant Health Inspectors to work with the Fijian Administration was extended. At the end of the year, six provinces had such inspectors working in them. A Manual of Village Hygiene has been produced and has been widely distributed to Medical and other Departmental staff and to the officials of the Fijian Administration. This sets out in clear and simple language the basic requirements of good rural hygiene, and contains drawings and specifications of houses, refuse incinerators, simple water supplies, etc., suitable for rural areas.

147. The self-help campaign for the installation of the water-seal pit latrine has been stepped up. Departmental staff are available to go to villages and work with the people on the manufacture and installation of these units. A simple " do-it-yourself " booklet was produced and is made freely available. Local builders have also been encouraged to purchase moulds from the Department for the manufacture and sale to the public of these items. During the year, 565 water-seal latrines were installed with the assistance of the Department.

148. A close co-operation was maintained with the Public Works Department on the scheme for the installation of rural water supplies, during the year.

QUARANTINE

149. There are now three ports of entry for vessels coming from any area to Fiji: namely, Suva, Lautoka and Levuka. Airports of entry are, for aircraft coming from any area, Nadi and Laucala Bay; for aircraft from non-malarious areas only, Nausori.

150. Medical Officers are available at each of these ports, along with a staff of Health Inspectors and Assistant Health Inspectors. In addition to normal quarantine duties, this section of the Department is also responsible for ensuring that the territory remains free from anopheline mosquitoes. Although these measures against anophelines are frequently irksome and time-consuming, for both passengers and staff of shipping companies and airlines, they are of great importance. There is no doubt that the establishment of the malaria vector would lead to very serious consequences; for there is a reservoir of parasites in the population following the service of the Fiji Military Forces in malarious countries. The staff of the quarantine section also have special responsibilities for the control of the *Aedes aegypti* mosquito, which is indigenous to Fiji, in port areas.

MATERNAL AND CHILD HEALTH

151. The maternal and child health services are based on district nursing stations of which there are 123 throughout the Colony. Each district nurse has a number of villages for which she is responsible, and the nurse/population ratio varies from approximately 1:1,200 in the Eastern Division where communications are difficult, to 1:3,200 in the Western and Central Divisions where communications are much more easy. The Colony-wide figure is 1:2,623.

152. There are twelve Health Sisters situated at Divisional Offices and other strategic points throughout the Colony who are professionally responsible for the district nurses' work.

153. These nurses provide ante-natal, domiciliary midwifery, and child welfare services; in addition they are available as a " first line of defence " for dealing with any clinical emergency in their areas pending the arrival of professional aid.

154. Much assistance was received during the year from the World Health Organization and United Nations Children's Fund. Two badly needed Land Rover vehicles were supplied to enable Health Sisters to travel their areas, and supplies of drugs and dietary supplements were received also, to augment those which are available from Government sources. Valuable supplies of skim milk were also received from the United States Government under the A.I.D. Programme. All these supplies have proved of great value in raising the nutritional status of expectant and nursing mothers and children.

VOLUNTARY ORGANIZATIONS

155. *The New Zealand and Fiji Lepers' Trust Boards*—continued to support the work of the Department during the year.

156. The money available, collected by the New Zealand Board and disbursed on its behalf by the Fiji Board, is used to provide grants to those discharged patients in need of assistance and for a variety of capital works. In addition, the New Zealand Board sends frequent gifts in kind for use at the Makogai Hospital and St. Elizabeth's Home.

157. The Fiji Board suffered a severe loss in the death of Mr. John Amputch, M.B.E., who had been a member for many years.

158. *War Memorial Anti-Tuberculosis Trust Fund*—In addition to the equipment for the X-ray Department at Labasa Hospital, the Trustees provided funds for an X-ray machine for the Department's new vessel which was under construction.

159. *British Red Cross Society*—The Fiji Branch of the Society maintained its valuable supportive role during 1964. The services rendered covered a wide range of activities.

160. *St. John Ambulance Brigade and Association*—First Aid and Home Nursing classes continued throughout the year and the enthusiasm of members was maintained. Personnel from the Brigade continued to give valuable service in manning ambulances at the Colonial War Memorial Hospital during the night hours.

161. *Home of Compassion*—The Home of Compassion, staffed by the Sisters of Compassion, accepts aged ladies who, for one reason or another, require some degree of nursing care. The institution is excellently run and fulfils a very real need.

162. *The Pearce Home*—This Home, formerly known as the Cottage Home, for aged people, is supported by public subscription and also is well organized and of great importance to the welfare of the elderly.

163. *Crippled Children's Association*—A Crippled Children's Association under the Presidency of Dr. Sahu Khan was formed during 1959 with branches in Lautoka and Suva. The aim of the Association is to arrange for treatment of crippled children, when this is possible, assist in rehabilitation and provide various aids and appliances where these are necessary.

V—TRAINING

FIJI SCHOOL OF MEDICINE

164. The Fiji School of Medicine provides training for medical and dental students and for those students studying the various ancillary subjects. The enrolment of the School in 1964 was as under—

Preliminary	18
Medical Course	59
Dental Course	24
Ancillary Courses	43
Agriculture (basic sciences)	12
Post-graduate Students	10
Visiting Students	2
	168

165. Diplomas and certificates gained by students during the year are shown in the following table:—

TABLE XXX

STUDENTS COMPLETING COURSES BY TERRITORY AND SUBJECT

Territory	Medical	Dental	C.P.H.	Laboratory Technician	Pharmacy	Radio-graphy	Dietetics	A.H.I.	A.H.I. Theory	Total
Fiji	..	6	..	2	..	1	..	..	8	17
British Solomon Islands Protectorate	2	..	..	..	..	..	..	..	1	3
New Hebrides	..	..	1	1	..	..	..	..	1	3
Papua-New Guinea	..	..	1	..	1	..	..	..	..	2
Cook Islands	1	..	..	..	..	..	1	..	..	2
Tonga	..	..	..	..	..	..	..	1	1	2
Western Samoa	..	..	..	..	..	..	..	1	..	1
United States Trust Territory	4	..	..	..	..	..	..	..	1	5
Tokelau Islands	1	..	..	..	..	..	..	..	..	1
Nauru Island	..	..	..	..	..	..	..	1	..	1
Total	8	6	2	3	1	1	1	3	12	37

166. The two visiting students were, one from Aberdeen University and one from Newcastle University, final year students sent out under the auspices of the Nuffield Foundation. The year 1964 was the third year in which this scheme operated, the students spending a period of three months in Fiji. There is little doubt that this scheme is of great benefit to both parties; the visitors see medicine as it is practiced in a developing country, the Fiji students in their turn gain much insight into the lives of their colleagues overseas.

167. The staff of the School of Sanitation—an integral part of the Fiji School of Medicine—continued their close association with various organizations concerned with extension teaching among the people of Fiji.

CENTRAL NURSING SCHOOL

168. The Central Nursing School provides undergraduate training for nurses at both the New Zealand curriculum level and on the local Colony level. Both courses last for three years, and all entrants to the School study together for their first three months in the School, after which the selection for the New Zealand Course is made.

169. The roll of the School as at 31st December, 1964, was made up as follows:—

	New Zealand Course	*Colony Course*
Fiji	55	80
Rarotonga, Cook Islands	5	..
New Hebrides	1	..
Western Samoa	3	..
Gilbert and Ellice Islands Colony	2	4
	66	84

170. Three nurses were successful in passing their New Zealand First Professional Examination and two passed their finals. Thirty-eight nurses passed their final examination at Colony level in 1964.

171. The Principal of the Central Nursing School also has the professional oversight of the post-graduate New Zealand Midwifery Training School situated at the Colonial War Memorial Hospital. This school was approved by the Director of Nursing for New Zealand in 1963 and the first four students commenced study in June.

LAUTOKA NURSING SCHOOL

172. The Nursing School at Lautoka provides training at the Colony level only. In 1964, there were 80 students in the school; 28 passed their final examinations successfully.

PUBLIC HEALTH NURSING SCHOOL

173. For some years it has been apparent that there was a need for a post-graduate course in Public Health Nursing. Accordingly, a curriculum suited to local standards was drawn up, to cover a period of three months full-time training. The course, which consists of lectures, discussion groups and practical work, places emphasis on domiciliary midwifery, ante-natal and post-natal care; infant welfare, family planning and health education. In addition, environmental health and various clinical specialties, in their relation to public health, are studied.

174. Two courses were held in 1964 and 8 students successfully completed the examination and gained their Certificate of Public Health Nursing.

C. H. GURD,
Director of Medical Services.

APPENDIX I

HOSPITALS AND DISPENSARIES

	Beds	
MAIN AND SPECIALIST HOSPITALS—		
Colonial War Memorial Hospital, Suva	279	
Tamavua Tuberculosis Hospital, Suva	360	
St. Giles' Mental Hospital, Suva	108	
Fiji Leprosy Hospital, Makogai	306	
	———	1,053
DISTRICT HOSPITALS—		
Lautoka	222	
Labasa	100	
Levuka	40	
	———	362
SUBSIDIZED HOSPITAL—		
Methodist Mission Hospital, Ba	51	
	———	51
RURAL HOSPITALS—		
Wainibokasi	49	
Waiyevo, Taveuni	52	
Nadi	34	
Savusavu	36	
Koromumu, Sigatoka	30	
Nabouwalu, Bua	33	
Vunisea, Kadavu	24	
Nailaga, Ba	26	
Vunidawa	19	
Rotuma	20	
Vaileka, Rakiraki	17	
Lomaloma, Lau	16	
Lakeba, Lau	11	
Matuku, Lau	8	
	———	375
Total ..		1,841

DISPOSITION OF URBAN AND RURAL DISPENSARIES

Suva Gaol
Samabula
Nuffield Clinic
Police Station
Nabua

Central Division (*under Divisional Medical Officer, Central*)—

Beqa
Korovou, Tailevu
Lodoni
Lomanikoro
Mokani
Namosi
Naqali
Nausori
Navua
Nayavu
Korovisilou
Laselevu

Eastern Division (*under Divisional Medical Officer, Eastern*)—

Gau
Kabara
Ono-i-Lau
Koro
Moala
Yaro, Kadavu

Western Division (*under Divisional Medical Officer, Western*)—

Korolevuiwai
Nadarivatu
Nadi Airport (administered from Suva)
Namarai
Tavua
Vatukoula
Natuatuacoko
Naviti
Tau
Nanukuloa
Nasau, Ra
Ba

Northern Division (*under Divisional Medical Officer, Northern*)—

Dreketi
Lekutu
Naduri
Kioa Island
Tukavesi
Natewa
Visoqo
Wainunu
Rabe Island
Saqani
Korotasere

Total Rural Dispensaries—46

APPENDIX II

RURAL HOSPITALS AND DISPENSARIES—UTILIZATION

Hospital	No. of Beds	No. of Admissions	Daily Average Number	Occupancy Index	No. of Out-Patients
Wainibokasi	49	1,520	38·7	0·79	8,337
Vunidawa	19	483	9·3	0·49	3,505
Rotuma	20	624	12·8	0·64	5,990
Vunisea	24	414	4·9	0·23	2,615
Matuku	8	285	4·7	0·58	1,818
Lakeba	11	176	5·3	0·48	3,161
Lomaloma	16	144	3·9	0·25	4,217
Koromumu	30	1,952	16·1	0·53	15,836
Nadi	34	1,673	29·4	0·86	42,546
Nailaga	26	1,168	19·0	0·73	27,826
Penang	17	973	9·8	0·57	22,208
Savusavu	36	1,327	26·2	0·73	11,142
Taveuni	52	951	20·14	0·39	13,432
Nabouwalu	33	353	6·9	0·21	3,382

Dispensary	*No. of Out-Patients*	*Dispensary*	*No. of Out-Patients*
Vatukoula	64,728	Lodoni	2,751
Ba Town	41,134	Mokani	2,579
Nadi Airport	29,059	Wainunu	2,513
Tavua	27,948	Gau	2,391
Nausori	24,421	Moala	2,228
Navua	16,508	Ono-i-Lau	2,125
Nuffield Clinic	15,278	Korovisilou	1,980
Nanukuloa	10,641	Yaro	1,923
Samabula	8,720	Nasau	1,716
Tau	7,219	Beqa	1,539
Korovou	5,525	Natewa	1,463
Nayavu	4,899	Korotasere	1,460
Dreketi	4,651	Natuatuacoko	1,377
Suva Gaol	4,618	Kabara	1,240
Lomanikoro	4,052	Namosi	1,219
Naqali	3,909	Nadarivatu	1,167
Tukavesi	3,849	Namarai	1,150
Saqani	3,467	Kese	987
Koro	3,387	Visoqo	937
Naduri	3,255	Laselevu	831
Rabe	2,797		

APPENDIX III

NOTIFIABLE DISEASES BY RACE

Disease	Europeans	Part-Europ.	Fijians	Indians	Others	Totals
1. Acute Poliomyelitis	....	....	....	....	....	....
2. Ankylostomiasis	....	....	191	339	9	539
3. Anthrax	....	....	....	....	....	....
4. Brucellosis (including Undulant Fever)	....	....	....	....	....	....
5. Chickenpox (Varicella)	37	9	427	226	71	770
6. Dengue Fever	....	....	....	....	....	....
7. Diphtheria	....	....	....	1	....	1
8. Dysentery—						
(*a*) Amoebic	....	....	2	4	....	6
(*b*) Bacillary	1	1	30	89	2	123
9. Encephalitis	....	....	3	2	1	6
10. Enteric Fever—						
(*a*) Typhoid	....	....	....	....	....	....
(*b*) Para-typhoid	....	....	....	....	....	....
11. Erysipelas	....	....	7	....	1	8
12. Food Poisoning	3	....	22	14	....	39
13. German Measles (Rubella)	6	2	125	25	4	162
14. Infantile Diarrhoea	....	23	2,177	2,469	79	4,748
15. Infective Hepatitis	20	5	126	121	21	293
16. Influenza	235	176	20,710	22,272	2,522	45,915
17. Leprosy	....	....	16	12	1	29
18. Leptospirosis	....	....	....	....	....	....
19. Malaria	....	....	....	....	....	....
20. Measles (Morbilli)	83	27	2,773	1,135	368	4,386
21. Meningitis	....	2	12	11	1	26
22. Puerperal Pyrexia (including Puerperal Fever)	....	3	43	144	4	194
23. Rheumatism (Acute)	....	....	13	29	10	52
24. Scarlet Fever	....	....	....	....	....	....
25. Tetanus	....	....	23	23	2	48
26. Trachoma	8	12	230	57	73	380
27. Tuberculosis—						
(*a*) Pulmonary	3	5	372	70	34	484
(*b*) Other Than Pulmonary	....	....	22	7	3	32
28. Venereal Diseases—						
(*a*) Gonorrhoea	12	21	258	140	24	455
(*b*) Granuloma Venereum	....	....	....	....	....	....
(*c*) Ophthalmia Neonatorum and Gon. Ophthalmia	....	....	10	6	1	17
(*d*) Lymphogranuloma Inguinale	....	....	....	....	....	....
(*e*) Soft Chancre	2	....	1	1	....	4
(*f*) Syphilis	5	....	6	13	1	25
(*g*) Venereal Warts	....	....	....	....	....	....
29. Vitamin and Other Dietary Deficiencies	....	....	14	28	1	43
30. Whooping Cough	....	3	281	550	59	893
31. Yaws	....	....	24	9	4	37
Total	415	289	27,918	27,797	3,296	59,715

APPENDIX III—*continued*

NOTIFIABLE DISEASES BY MONTH

Disease	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
1. Acute Poliomyelitis	....	....	....	....	....	....	....	....	....	....	....	....	....
2. Ankylostomiasis	33	27	22	12	10	39	72	62	58	56	65	83	539
3. Anthrax	....	....	....	....	....	....	....	....	....	....	....	....	....
4. Brucellosis (including Undulant Fever)	....	....	....	....	....	....	....	....	....	....	....	....	....
5. Chickenpox (Varicella)	55	11	19	39	16	33	63	60	79	106	119	170	770
6. Dengue Fever	....	....	....	....	....	....	....	....	....	....	....	....	....
7. Diphtheria	....	....	....	....	....	....	....	....	1	....	....	....	1
8. Dysentery—													
(*a*) Amoebic	1	....	....	1	....	....	....	1	1	....	1	1	6
(*b*) Bacillary	9	19	11	17	6	18	7	5	6	8	10	7	123
9. Encephalitis	3	....	....	....	....	1	....	....	1	....	1	....	6
10. Enteric Fever—													
(*a*) Typhoid	....	....	....	....	....	....	....	....	....	....	....	....	....
(*b*) Para-Typhoid	....	....	....	....	....	....	....	....	....	....	....	....	....
11. Erysipelas	....	....	....	....	....	1	....	3	1	2	1	....	8
12. Food Poisoning	....	....	....	....	....	....	....	....	....	32	....	7	39
13. German Measles (Rubella)	20	13	31	31	8	45	2	1	6	1	2	2	162
14. Infantile Diarrhoea	366	439	452	653	511	365	347	264	329	252	342	428	4,748
15. Infective Hepatitis	17	29	26	43	31	19	24	15	24	18	17	30	293
16. Influenza	2,162	1,976	2,391	2,484	14,698	9,335	3,365	1,509	1,726	1,918	1,881	2,470	45,915
17. Leprosy	1	....	2	4	....	3	....	7	....	7	....	5	29
18. Leptospirosis	....	....	....	....	....	....	....	....	....	....	....	....	....
19. Malaria	....	....	....	....	....	....	....	....	....	....	....	....	....
20. Measles (Morbilli)	1,306	982	869	442	296	156	98	71	83	27	27	29	4,386
21. Meningitis	1	2	1	3	1	....	1	....	2	3	3	9	26
22. Puerperal Pyrexia (including Puerperal Fever)	7	12	11	11	32	23	16	18	24	15	5	20	194
23. Rheumatism (Acute)	....	....	....	....	....	....	7	5	4	8	10	18	52
24. Scarlet Fever	....	....	....	....	....	....	....	....	....	....	....	....	....
25. Tetanus	....	6	8	7	5	3	5	4	4	2	2	2	48
26. Trachoma	20	27	14	32	54	25	19	35	17	55	14	68	380
27. Tuberculosis—													
(*a*) Pulmonary	32	53	53	25	43	53	39	35	43	36	41	31	484
(*b*) Other than Pulmonary	....	2	3	2	2	5	....	5	3	4	4	2	32
28. Venereal Diseases—													
(*a*) Gonorrhoea	36	32	33	24	17	30	46	26	38	57	53	63	455
(*b*) Granuloma Venereum	....	....	....	....	....	....	....	....	....	....	....	....	....
(*c*) Oph. Neonatorum & Gon. Oph.	....	2	2	1	3	2	4	....	3	....	....	....	17
(*d*) Lymphogranuloma Inguinale	....	....	....	....	....	....	....	....	....	....	....	....	....
(*e*) Soft Chancre	....	2	....	....	1	....	....	....	....	....	....	1	4
(*f*) Syphilis	1	....	5	5	4	5	1	....	1	2	1	....	25
(*g*) Venereal Warts	....	....	....	....	....	....	....	....	....	....	....	....	....
29. Vit. & Other Dietary Deficiencies	....	....	....	....	....	....	....	....	26	8	2	7	43
30. Whooping Cough (Pertussis)	133	72	66	69	106	68	74	72	71	45	57	60	893
31. Yaws	1	6	3	5	....	5	3	....	....	1	9	4	37
Total	4,204	3,712	4,022	3,910	15,844	10,234	4,193	2,198	2,551	2,663	2,667	3,517	59,715

APPENDIX IV

VITAL STATISTICS

(1) ESTIMATED POPULATION AT 31ST DECEMBER, 1964

Race	Male	Female	Total	(1963)	Difference	Per cent Increase	Population per sq. mile
Fijians	96,362	92,807	189,169	183,383	5,786	3·15	26·87
Indians	116,841	111,335	228,176	220,175	8,001	3·63	32·41
Europeans	5,661	5,170	10,831	10,418	413	3·96	1·54
Part-Europeans	4,986	4,817	9,803	9,449	354	3·74	1·39
Other Islanders	3,803	3,429	7,232	6,977	255	3·65	1·03
Rotumans	2,871	2,764	5,635	5,492	153	2·60	0·80
Chinese	3,196	2,227	5,423	5,294	129	2·43	0·77
Others	54	67	121	113	8	7·08	0·02
Totals	233,774	222,616	456,390	441,301	15,089	3·42	64·83

(2) BIRTHS RECORDED DURING YEARS 1961–1964

Race	1961	1962	1963	1964	1964 Population	Crude Birth-rate per *mille* of population 1964
Fijians	6,362	6,626	6,817	6,966	189,169	36·82
Indians	9,177	8,909	8,692	8,936	228,176	39·16
Europeans	189	180	123	163	10,831	15·05
Part-Europeans	292	315	335	310	9,803	31·62
Other Islanders	237	252	196	288	7,232	39·82
Rotumans	222	185	192	185	5,635	32·83
Chinese	117	177	159	140	5,423	25·81
Others	....	....	5	1	121	8·26
Totals	16,595	16,644	16,519	16,989	456,390	37·22

(3) DEATHS RECORDED DURING YEARS 1961–1964

Race	1961	1962	1963	1964	1964 Population	Crude Death-rate per *mille* of population 1964
Fijians	1,205	1,311	1,158	1,260	189,169	6·66
Indians	1,252	1,145	1,168	1,255	228,176	5·50
Europeans	38	35	40	31	10,831	2·86
Part-Europeans	30	47	39	49	9,803	5·00
Other Islanders	37	33	42	58	7,232	8·02
Rotumans	36	43	37	42	5,635	7·45
Chinese	24	39	24	24	5,423	4·42
Others	....	....	2	1	121	8·26
Totals	2,622	2,653	2,510	2,720	456,390	5·96

(4) MARRIAGES, BIRTHS, DEATHS AND NATURAL INCREASES—1964

Race	Marriages	Births	Deaths	Net Increase	1963 Population	Increase per *mille*
Fijians	1,329	6,966	1,260	5,706	183,383	31·11
Indians	1,838	8,936	1,255	7,681	220,175	34·88
Europeans	46	163	31	132	10,418	12·67
Part-Europeans	54	310	49	261	9,449	27·62
Other Islanders	49	288	58	230	6,977	32·96
Rotumans	28	185	42	143	5,492	26·03
Chinese	28	140	24	116	5,294	21·91
Others	1	1	1	....	113	....
Totals	3,373	16,989	2,720	14,269	441,301	32·33

(5) INFANT AND CHILD MORTALITY

	Births	Deaths Under 5 Years						Infant Mortality Rate per *mille*
		Under 1	1–2	2–3	3–4	4–5	Total	
1961—								
Fijians	6,362	193	90	24	15	12	334	30
Indians	9,177	336	28	20	19	....	403	37
1962—								
Fijians	6,626	243	88	19	14	7	371	37
Indians	8,909	227	24	10	6	7	271	25
1963—								
Fijians	6,817	173	78	28	17	13	309	25
Indians	8,692	256	23	16	9	7	311	29
1964—								
Fijians	6,966	194	84	35	24	16	353	27
Indians	8,936	292	40	12	8	12	364	32

APPENDIX V

Return of Diseases and Deaths for the year 1964, at the Colonial War Memorial, Tamavua, Lautoka, Labasa and Levuka Hospitals.

Intermediate List Number	Detailed List Numbers	Cause Groups	Euro.	Fijian	Ind.	Oth.	Totals	Deaths
		I—INFECTIVE AND PARASITIC DISEASES						
A 1	001–008	Tuberculosis of respiratory system	7	402	84	42	535	29
A 2	010	Tuberculosis of meninges and central nervous system	..	12	..	2	14	2
A 3	011	Tuberculosis of intestines, peritoneum and mesenteric glands	1	15	4	4	24	1
A 4	012,013	Tuberculosis of bones and joints	1	28	5	2	36	..
A 5	014–019	Tuberculosis, all other forms	1	19	6	2	28	..
A 6	020	Congenital syphilis	..	..	2	..	2	..
A 7	021	Early syphilis	..	..	..	..	..	..
A 8	024	Tabes dorsalis	..	..	1	..	1	..
A 9	025	General paralysis of insane	..	..	..	..	..	..
A 10	022, 023, 026–029	All other Syphilis	3	1	2	..	6	..
A 11	030–035	Gonococcal infections	3	5	3	..	11	..
A 12	040	Typhoid Fever	..	1	2	..	3	..
A 13	041,042	Paratyphoid fever and other Salmonella infections	..	..	..	..	..	..
A 14	043	Cholera	..	..	..	..	..	..
A 15	044	Brucellosis (undulant fever)	..	..	..	..	..	..
A 16 (*a*)	045	Bacillary dysentery	..	6	5	1	12	2
(*b*)	046	Amoebiasis	1	4	7	..	12	..
(*c*)	047, 048	Other unspecified forms of dysentery	1	6	5	1	13	..
A 17	050	Scarlet fever	..	..	..	..	..	..
A 18	051	Streptococcal sore throat	..	..	..	..	..	..
A 19	052	Erysipelas	..	1	..	..	1	..
A 20	053	Septicaemia and pyaemia	..	..	3	..	3	2
A 21	055	Diphtheria	..	..	..	..	..	..
A 22	056	Whooping Cough	..	3	5	..	8	..
A 23	057	Meningococcal infections	1	5	3	1	10	5
A 24	058	Plague	..	..	..	..	..	..
A 25	060	Leprosy	..	2	1	..	3	..
A 26	061	Tetanus	..	12	11	1	24	11
A 27	062	Anthrax	..	..	..	..	..	..
A 28	080	Acute poliomyelitis	..	..	..	..	..	..
A 29	082	Acute infectious encephalitis	..	1	2	1	4	2
A 30	081, 083	Late effects of acute poliomyelitis and acute infectious encephalitis	..	..	2	..	2	..
A 31	084	Smallpox	..	..	..	..	..	..
A 32	085	Measles	..	13	6	..	19	1
A 33	091	Yellow fever	..	..	..	..	..	..
A 34	092	Infectious Hepatitis	8	33	38	4	83	4
A 35	094	Rabies	..	..	..	..	..	..
A 36 (*a*)	100	Louse-borne epidemic typhus	..	..	..	..	..	..
(*b*)	101	Flea-borne endemic typhus (murine)	..	..	..	..	..	..
(*c*)	104	Tick-borne epidemic typhus	..	..	..	..	..	..
(*d*)	105	Mite-borne typhus	..	..	..	..	..	..
(*e*)	102, 103 106–108	Other and unspecified typhus	..	..	..	..	..	..
A 37 (*a*)	110	Vivax malaria (benign tertian)	..	..	..	..	..	..
(*b*)	111	Malariae malaria (quartan)	..	..	..	..	..	..
(*c*)	112	Falciparum malaira (Malignant tertian)	..	..	..	..	..	..
(*d*)	115	Blackwater fever	..	..	..	..	..	..
(*e*)	113, 114 116, 117	Other and unspecified forms of malaria	..	..	..	..	..	..
A 38 (*a*)	123·0	Schistosomiasis vesical (S. haematobium)	..	..	..	..	..	..
(*b*)	123·1	Schistosomiasis intestinal (S. Mansoni)	..	..	..	..	..	..
(*c*)	123·2	Schistosomiasis pulmonary (S. japonicum)	..	..	..	..	..	..
(*d*)	123·3	Other and unspecified schistosomiasis	..	..	..	..	..	..
A 39	125	Hydatid disease	..	..	1	..	1	..
A 40 (*a*)	127	Onchocerciasis	..	..	..	..	..	..
(*b*)		Loiasis	..	..	..	..	..	..
(*c*)		Filariasis (bancrofti)	1	11	4	1	17	..
(*d*)		Other filariasis	..	..	..	..	..	..
A 41	129	Ankylostomiasis	..	8	24	..	32	..
A 42 (*a*)	126	Tapeworm(infestation) and other cestode infestations	..	..	..	..	..	..
(*b*)	130·0	Ascariasis	..	13	29	2	44	1
(*c*)	130·3	Guinea worm (dracunculosis)	..	..	..	..	..	..
(*d*)	124, 128, 130·1, 130·2	Other diseases due to helminths	..	..	..	..	..	..
A 43 (*a*)	037	Lymphogranuloma Venereum	..	3	4	..	7	..
(*b*)	038	Granuloma inguinale, venereal	..	3	2	1	6	..
(*c*)	039	Other and unspecified venereal diseases	..	..	..	..	..	..
(*d*)	049	Food poisoning infection and intoxication	1	10	1	1	13	..
(*e*)	071	Relapsing fever	..	..	..	..	..	..
(*f*)	072	Leptospirosis icterohaemorrhagica (Weil's disease)	..	..	..	..	..	..
(*g*)	073	Yaws	..	..	..	..	..	..
(*h*)	087	Chickenpox	..	4	2	..	6	..
(*i*)	090	Dengue	..	..	..	..	..	..
(*j*)	095	Trachoma	..	3	..	..	3	..
(*k*)	096·7	Sandfly fever	..	..	..	..	..	..
(*l*)	120	Leishmaniasis	..	..	..	..	..	..
(*m*)	121 (*a*)	Trypanosomiasis gambiensis	..	..	..	..	..	..
	(*b*)	Trypanosomiasis rhodesiensis	..	..	..	..	..	..
	(*c*)	Other and unspecified Trypanosomiasis	..	..	..	..	..	..
(*n*)	131	Dermatophytosis	..	..	4	..	4	..
(*o*)	135	Scabies	2	7	..	1	10	..

Intermediate List Number		Detailed List Numbers	Cause Groups	Euro.	Fijian	Ind.	Other	Total	Deaths
A	43 (*p*)	036, 054, 059, 063, 064, 070, 074, 086, 088, 089, 093, 096·1–096·6, 096·8, 096·9, 122, 132–134, 136–138	All other diseases classified as infective and parasitic ..	6	8	31	2	47	..
			II—NEOPLASMS						
A	44	140–148	Malignant neoplasm of buccal cavity and pharynx	..	1	1	2	4	..
A	45	150	Malignant neoplasms of oesophagus	..	..	1	1	2	..
A	46	151	Malignant neoplasm of stomach	..	8	13	..	21	5
A	47	152, 153	Malignant neoplasm of intestine, except rectum	5	6	2	1	14	2
A	48	154	Malignant neoplasm of rectum	..	1	2	..	3	1
A	49	161	Malignant neoplasm of larynx	..	..	..	..	..	..
A	50	162, 163	Malignant neoplasm of trachea, and of bronchus and lung not specified as secondary	1	2	5	..	8	1
A	51	170	Malignant neoplasm of breast	..	3	5	2	10	..
A	52	171	Malignant neoplasm of cervix uteri	2	12	26	..	40	3
A	53	172–174	Malignant neoplasm of other and unspecified parts of uterus	1	3	10	1	15	1
A	54	177	Malignant neoplasm of prostate	1	3	2	..	6	3
A	55	190, 191	Malignant neoplasm of skin	5	7	2	..	14	1
A	56	196, 197	Malignant neoplasm of bone and connective tissue	2	7	9	1	19	1
A	57	155, 160, 164, 165, 175, 176, 178–181, 192–195, 198, 199	Other and unspecified sites	7	19	23	5	54	8
A	58	204	Leukaemia and aleukaemia	..	6	3	..	9	4
A	59	200–203, 205	Lymphosarcoma and other neoplasms of lymphatic and haematopoietic system	..	4	8	1	13	1
A	60	210–239	Benign neoplasms and neoplasms of unspecified nature ..	11	27	47	4	89	1
			III—ALLERGIC, ENDOCRINE SYSTEM METABOLIC AND NUTRITIONAL DISEASES						
			IV—DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS						
A	61	250, 251	Nontoxic goitre	..	6	38	..	44	..
A	62	252	Thyrotoxicosis with or without goitre	2	2	16	1	21	1
A	63	260	Diabetes mellitus	14	47	296	6	363	7
A	64 (*a*)	280	Beriberi	..	..	2	..	2	..
	(*b*)	281	Pellagra	..	..	..	..	..	..
	(*c*)	282	Scurvy	..	..	..	..	..	..
	(*d*)	283–286	Other deficiency states	..	41	20	3	64	13
A	65 (*a*)	290	Pernicious and other hyperchromic anaemias	2	1	28	..	31	1
	(*b*)	291	Iron deficiency anaemias (hypochromic)	2	32	102	1	137	4
	(*c*)	292, 293	Other specified and unspecified anaemias	..	6	38	..	44	2
A	66 (*a*)	241	Asthma	3	35	30	2	70	..
	(*b*)	240, 242–245, 253, 254, 270–277, 287–289, 294–299	All other allergic disorders endocrine, metabolic and blood diseases	9	18	32	4	63	6
			V—MENTAL, PSYCHONEUROTIC AND PERSONALITY DISORDERS						
A	67	300–309	Psychoses	2	11	32	1	46	..
A	68	310–324, 326	Psychoneuroses and disorders of personality	16	12	29	..	57	..
A	69	325	Mental deficiency	1	1	5	..	7	..
			VI—DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS						
A	70	330–334	Vascular lesions affecting central nervous system	11	15	42	7	75	22
A	71	340	Nonmeningococcal Meningitis	4	46	31	7	88	17
A	72	345	Multiple sclerosis	..	..	1	..	1	..
A	73	353	Epilepsy	3	10	26	3	42	1
A	74	370–379	Inflammatory diseases of eye	1	29	31	4	65	..
A	75	385	Cataract	4	18	112	..	134	..
A	76	387	Glaucoma	7	7	7	2	23	..
A	77 (*a*)	390	Otitis externa	3	5	5	1	14	..
	(*b*)	391–393	Otitis media and mastoiditis	3	9	10	1	23	..
	(*c*)	394	Other inflammatory diseases of ear	..	..	1	..	1	..
A	78 (*a*)	380–384, 386, 388, 389	All other diseases and conditions of eye	9	19	56	2	86	1
	(*b*)	341, 344 350–352, 360–369 395–398	All other diseases of the nervous system and sense organs ..	12	25	54	6	97	5

Intermediate List Number	Detailed List Numbers	Cause Groups	Euro.	Fijian	Ind.	Other	Total	Deaths
		VII—DISEASES OF THE CIRCULATORY SYSTEM						
A 79	400–402	Rheumatic fever	2	17	55	1	75	..
A 80	410–416	Chronic rheumatic heart disease	8	34	117	10	169	11
A 81	420–422	Arteriosclerotic and degenerative heart disease	22	14	102	6	144	25
A 82	430–434	Other diseases of heart	6	37	114	101	258	42
A 83	440–443	Hypertension with heart disease	8	6	32	1	47	5
A 84	444–447	Hypertension without mention of heart	4	13	55	..	72	4
A 85	450–456	Diseases of arteries	2	3	5	..	10	1
A 86	460–468	Other diseases of circulatory system	23	26	79	4	132	7
		VIII—DISEASES OF THE RESPIRATORY SYSTEM						
A 87	470–475	Acute upper respiratory infections	21	72	71	13	177	1
A 88	480–483	Influenza	7	60	59	8	134	..
A 89	490	Lobar pneumonia	21	250	94	21	386	16
A 90	491	Bronchopneumonia	20	244	229	16	509	51
A 91	492, 493	Primary atypical, other and unspecified pneumonia	3	19	25	..	47	5
A 92	500	Acute bronchitis	9	30	27	8	74	2
A 93	501, 502	Bronchitis, chronic and unqualified	15	16	34	2	67	1
A 94	510	Hypertrophy of tonsils and adenoids	21	5	182	4	212	..
A 95	518, 521	Empyema and abscess of lung	..	13	7	1	21	3
A 96	519	Pleurisy	..	4	8	2	14	..
A 97 (*a*)	523	Pneumoconiosis	..	..	..	..	..	..
(*b*)	511–517, 520–522, 524–527	All other respiratory diseases	4	62	89	6	161	4
		IX—DISEASES OF THE DIGESTIVE SYSTEM						
A 98 (*a*)	530	Dental caries	4	1	5	..	10	..
(*b*)	531–535	All other diseases of teeth and supporting structures	4	11	24	..	39	..
A 99	540	Ulcer of stomach	3	60	114	10	187	8
A 100	541	Ulcer of duodenum	4	17	70	3	94	2
A 101	543	Gastritis and duodenitis	8	11	48	2	69	..
A 102	550–553	Appendicitis	37	102	193	21	353	..
A 103	560, 561, 570	Intestinal obstruction and hernia	25	77	145	9	256	6
A 104 (*a*)	571·0	Gastro-enteritis and colitis between 4 weeks and 2 years	13	63	116	6	198	20
(*b*)	571·1	Gastro-enteritis and colitis, ages 2 years and over	15	71	69	11	166	9
(*c*)	572	Chronic enteritis and ulcerative colitis	..	6	9	..	15	1
A 105	581	Cirrhosis of liver	1	16	7	..	24	6
A 106	584, 585	Cholelithiasis and cholecystitis	14	11	59	4	88	1
A 107	536–539, 542, 544, 545, 573–580, 582, 583, 586, 587	Other diseases of digestive system	18	54	156	8	236	15
		X—DISEASES OF THE GENITO-URINARY SYSTEM						
A 108	590	Acute nephritis	1	5	9	1	16	2
A 109	591–594	Chronic, other and unspecified nephritis	8	42	51	7	108	11
A 110	600	Infections of kidney	8	6	27	1	42	1
A 111	602, 604	Calculi of urinary system	5	2	65	6	78	..
A 112	610	Hyperplasia of prostate	1	10	31	..	42	2
A 113	620, 621	Diseases of breast	2	10	8	2	22	..
A 114 (*a*)	613	Hydrocele	9	53	39	9	110	..
(*b*)	634	Disorders of menstruation	24	30	130	5	189	1
(*c*)	601, 603, 605–609, 611, 612, 614–617, 622–633, 635–637	All other diseases of the genito-urinary system	55	148	447	27	677	4
		XI—DELIVERIES AND COMPLICATIONS OF PREGNANCY, CHILDBIRTH AND THE PUERPERIUM						
A 115	640–641, 681, 682, 684	Sepsis of pregnancy, childbirth and the puerperium	2	17	49	6	74	..
A 116	642, 652, 685, 686	Toxaemias of pregnancy and the puerperium	6	46	238	15	305	..
A 117	643, 644, 670–672	Haemorrhage of pregnancy and childbirth	12	166	130	39	347	..
A 118	650	Abortion without mention of sepsis or toxaemia	34	120	330	9	493	2
A 119	651	Abortion with sepsis	1	15	9	..	25	..
A 120 (*a*)	645–649, 473–680, 683, 687–689	Other complications of pregnancy, childbirth and the puerperium	42	269	954	73	1,338	1
(*a*)	660	Delivery without complications	140	1,077	2,314	304	3,835	..

Intermediate List Number	Detailed List Numbers	Cause Groups	Euro.	Fijian	Ind.	Other	Total	Deaths
		XII—DISEASES OF THE SKIN AND CELLULAR TISSUE						
		XIII—DISEASES OF THE BONES AND ORGANS OF MOVEMENT						
A 121	690–698	Infections of skin and subcutaneous tissue	38	269	214	25	546	5
A 122	720–725	Arthritis and spondylitis	12	46	83	1	142	..
A 123	726, 727	Muscular rheumatism and rheumatism unspecified	1	3	25	1	30	..
A 124	730	Osteomyelitis and periostitis	8	28	26	..	62	1
A 125	737,745–749	Ankylosis and acquired musculo-skeletal deformities	..	4	3	..	7	..
A 126 (*a*)	715	Chronic Ulcer of Skin (including tropical ulcer)	3	7	12	1	23	..
(*b*)	700–714, 716	All other diseases of skin	4	8	14	..	26	..
(*c*)	731–736, 738–744	All other diseases of musculo-skeletal system	15	33	72	4	124	..
		XIV—CONGENITAL MALFORMATIONS						
A 127	751	Spina bifida and meningocele	..	1	9	1	11	..
A 128	754	Congenital malformations of circulatory system	2	11	25	2	40	7
A 129	750, 752, 753, 755–759	All other congenital malformations	6	28	106	10	150	8
		XV—CERTAIN DISEASES OF EARLY INFANCY						
A 130	760, 761	Birth injuries	..	2	6	1	9	5
A 131	762	Postnatal asphxia and atelectasis	..	2	2	..	4	3
A 132 (*a*)	764	Diarrhoea of newborn (under 4 weeks)	..	1	3	..	4	..
(*b*)	765	Ophthalmia neonatorum	..	..	..	..	..	..
(*c*)	763, 766–768	Other Infections of newborn	..	4	4	..	8	..
A 133	770	Haemolytic disease of newborn	1	..	..	..	1	1
A 134	769, 771, 772	All other defined diseases of early infancy	..	3	6	..	9	1
A 135	773, 776	Ill-defined diseases peculiar to early infancy, and immaturity unqualified	1	12	113	1	127	41
		XVI—SYMPTOMS, SENILITY AND ILL-DEFINED CONDITIONS						
A 136	794	Senility without mention of psychosis	2	..	6	1	9	..
A 137 (*a*)	788·8	Pyrexia of unknown origin	13	17	29	1	60	3
(*b*)	793	Observation, without need for further medical care	72	238	729	38	1,077	1
(*c*)	780–787, 788·1–788·7, 788·9, 789–792, 795	All other ill-defined causes of morbidity	13	13	124	2	152	3

"E" CODE—ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE (EXTERNAL CUASE)

Intermediate List Number	Detailed List Numbers	Cause Groups	Eur.	Fijian	Ind.	Oth.	Totals	Death
AE 138	E810–E835	Motor vehicle accidents	15	35	97	8	155	8
AE 139	E800–E802, E840–E866	Other transport accidents	1	8	23	..	32	1
AE 140	E870–E895	Accidental poisoning	10	23	81	5	119	5
AE 141	E900–E904	Accidental falls	42	70	148	14	274	..
AE 142	E912	Accident caused by machinery	3	5	14	..	22	1
AE 143	E916	Accident caused by fire and explosion of combustible material	6	16	23	4	49	6
AE 144	E917, E918	Accident caused by hot substance, corrosive liquid, steam and radiation	6	29	35	1	71	3
AE 145	E919	Accident caused by firearm	..	2	2	..	4	..
AE 146	E929	Accidental drowning and submersion	..	3	2	..	5	..
AE 147 (*a*)	E920	Foreign body entering eye and adnexa	4	17	26	1	48	..
(*b*)	E923	Foreign body entering other orifice	4	4	6	1	15	1
(*c*)	E927	Accidents caused by bites and stings of venomous animals and insects	1	17	18	..	36	1
(*d*)	E928	Other accidents caused by animals	..	2	12	..	14	..
(*e*)	E910, E911, E913–E915, E921–E922, E924–E926 E930–E965	All other accidental causes	8	91	50	11	160	1
AE 148	E970–E979	Suicide and non-accidental self-inflicted injury	2	12	21	2	37	..
AE 149	E980–E985	Homicide and injury purposely inflicted by other persons (not in war)	8	65	72	2	147	3
AE 150	E990–E999	Injury resulting from operation of war	..	1	1	..	2	..

"N"—CODE ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE (NATURE OF INJURY)

Intermediate List Number	Detailed List Numbers	Cause Groups	Eur.	Fijian	Ind.	Oth.	Totals	Deaths
AN 138	N800–N804	Fracture of skull	11	53	56	6	126	6
AN 139	N805–N809	Fracture of spine and trunk	4	10	16	3	33	2
AN 140	N810–N829	Fracture of limbs	27	78	168	9	282	1
AN 141	N830–N839	Dislocation without fracture	1	8	10	2	21	..
AN 142	N840–N848	Sprains and strains of joints and adjacent muscle	2	12	6	2	22	..
AN 143	N850–N856	Head injury (excluding fracture)	13	47	45	6	111	1
AN 144	N860–N869	Internal injury of chest, abdomen and pelvis	3	1	14	2	20	2
AN 145	N870–N908	Laceration and open wounds	14	81	102	2	199	3
AN 146	N910–N929	Superficial injury, contusion and crushing with intact skin surface	2	15	30	1	48	..
AN 147	N930–N936	Effects of foreign body entering through orifice	5	7	14	1	27	2
AN 148	N940–N949	Burns	11	42	59	7	119	8
AN 149	N960–N979	Effects of poisons	14	22	84	6	126	5
AN 150	N950–N959 N980–N999	All other and unspecified effects of external causes	3	24	27	2	56	..

APPENDIX VI

ENVIRONMENTAL SANITATION

URBAN/TOWNSHIP/RURAL SANITARY DISTRICTS OF THE COLONY OF FIJI

REPORT OF HEALTH INSPECTORS FOR THE YEAR 1964

1—Summary of Inspections

Type of Premises, etc.	*Inspections*	*Re-Inspections*	*Total*
House-to-house Inspection of District	54,678	23,723	78,401
Investigation of Complaints, Nuisances, etc.	1,335	685	2,020
New Buildings Sites—before approval	4,332	244	4,576
New Buildings Works in Progress	3,248	1,400	4,648
Investigation of Infectious Disease and Disinfection	1,889	82	1,971
Shipping Sanitary Surveys	137	18	155
Houses-let-as-Lodgings and Lodging Houses	809	709	1,518
Factories and Workshops	817	453	1,270
Cemeteries	106	73	179
Schools	546	252	798
Checking Sanitary Services (A/Cs, etc.)	394	171	565
Laundries	512	335	847
Hairdressers, Chiropodists, etc.	1,266	824	2,090
Foodshops, Foodstores, Markets, etc.	5,894	2,856	8,750
Eating Houses and Ice Cream Premises	2,742	1,883	4,625
Aerated Water and Ice Factories	203	130	333
Kava Saloons	460	329	789
Bakehouses	909	678	1,587
Slaughterhouses	150	111	261
Butchers Shops	627	520	1,147
Food Vehicles	730	438	1,168
Miscellaneous inspections	1,721	512	2,233
Total	83,505	36,426	119,931

2—Written Notices, Etc., Issued

Type of Notices, etc.	*Number*
Intimation Notices Served	6,709
Buildings Surveyed for Closure or Demolition	1,542
Closing Orders Served	90
Buildings Demolished after Service of Orders by Owners	11
Statutory Notices Served	408
Demolition Orders Served	8

3—Building Applications Dealt With

Applications in respect of	*Number*	*Value*
New commercial buildings	332	£746,702 0 0
New dwellings	3,520	1,972,153 0 0
Alterations and repairs	1,130	486,497 10 0
Miscellaneous works	1,337	562,734 10 0
Septic Tank installations	116	21,541 10 0
Total	6,435	£3,791,628 10 0

Completion certificates issued in respect of—			
New commercial buildings	121	£479,829	0 0
New dwellings	905	703,597	0 0
Alterations and repairs	276	108,481	0 0
Miscellaneous works	313	151,006	0 0
Septic Tank installations	67	7,565	0 0
Total ..	1,682	£1,450,478	0 0

4—Summary of Sanitary Improvements, etc. (All Types of Premises)

Item	*Ordered*	*Completed**
Repairing of Buildings	1,260	511
Improvements to Lighting and Ventilation of Buildings	319	160
Removal of Unauthorized Erections	394	163
Abatement of Overcrowding	207	79
New Privies (all types)	2,007	961
Repairing, Cleansing or Flyproofing of Privies ..	5,942	3,811
Filling in of Insanitary Privies	1,184	787
New Bathrooms or Washing Places	256	123
Repairing or Cleansing of Bathrooms or Washing Places	2,812	1,141
New Kitchens	468	141
Repairing or Cleansing of Kitchens	1,438	841
Provision of New Drains	1,554	1,002
Repairing or Cleansing of existing Drains	4,898	3,297
New Wells	208	79
Repairing or Improvement of Wells	1,009	636
New Water Tanks	143	91
Repairing, Screening or Cleansing of Water Tanks ..	1,841	1,109
Removal of Accumulations of Refuse, etc.	8,591	5,927
Clearing of Overgrowth or Long Grass	7,258	4,666
Provision of Garbage Tins	3,013	1,745
Abatement of Nuisances from Animals or Poultry ..	3,290	1,842
Abatement of Mosquito Breeding	4,161	3,128
Cleansing of Food Premises	3,011	2,271
Structural Improvements to Food Premises	609	350
Cleansing of Food Vehicles	272	236
Improvements to Food Vehicles	274	212
Cleansing or Improvement of Hairdressers Premises ..	628	583
Cleansing or Improvement of Laundries	320	236
Cleansing or Improvement of Schools	111	89
Cleansing or Improvement of Shipping	42	42
Impounding of Straying Cattle	3	3
Miscellaneous	1,450	1,017
Total ..	58,973	37,279

* This column may include work completed during the year under review but ordered during the previous year.

5—Mosquito Control

Premises Inspected for Mosquito Larvae ..	81,785
Premises at which larvae found	4,222
Larval Index	5·296%

6—Shipping Arrivals

	Number
(*a*) Pratique and boarded ..	84
(*b*) Radio pratique	219
(*c*) Pratique and Malarial inspection	164
(*d*) Pratique and Malarial spraying	101
Total ..	568

Aircraft Arrivals

	Number
(*a*) Malarial Spraying ..	811
(*b*) Not sprayed	1,447
Total ..	2,258

7—Disinfection, Disinfestation and Fumigation

Type of Premises, Vessels or Aircraft	*Method*	*Number*
Local Vessels	Cyanide	77
Local Vessels	Dieldrin	....
Overseas Vessels	Aerosol Bombs	....
Overseas Vessels	Cyanide	1
Aircraft	Aerosol Bombs	807
Office, Dwellings, Pit Latrines, etc.	DDT, Flit Dieldrin, Phenol and Nuvon, Pyagara smoke bombs, etc.	2,395
Second-hand Clothing	Formalin, Paraformaldehyde gas bags	205 bales
Hospitals	Dieldrin Formalin	16 wards
Wells	Chloride of Lime	57
Miscellaneous	DDT, etc.	111

	Number
International Deratization Certificates	4
International Deratization Exemption Certificates Issued	10
Local Vessels Fumigation Exemption Certificates	12

8—Anti-Rat Measures

Traps Set	6,470
Warfarin Baits Laid	1,917

	Others	*Rattus Rattus*	*Rattus Norvegicus*	*Total*
Rats Destroyed by Trapping	1,326	273	811	2,410
Rats Destroyed by Poison Baits	1,268	66	151	1,485
Rats Destroyed by Fumigation—				
Overseas Shipping	....	9	10	19
Local Shipping	....	44	2	46
Aircraft	....	..	..	....
Rats submitted for Laboratory Examination	....	..	..	....
Rats Found Infected	....	..	..	....

9—Supervision of Labour Gangs, Etc.

Number of men employed, Clearing and Draining Work done, Loads of Refuse removed, etc.—	
Number of men employed	131
Vacant Crown Land cleared of overgrowths	1,386 acres
Drains cleaned and regraded	10,522 chains
Number of loads of refuse removed	17,694 loads
Septic tanks emptied	....
Concrete Invert Drains laid	2,010 feet

10—Food Inspection and Sampling

Unsound Foodstuffs Condemned and Destroyed	189,417 lbs.
(Twenty-nine cartons of Pepsi Cola, 2 bags corned mutton, 3 doz. coconuts, 2 cases plum, 60 pkts. chewing gum and 88 gallons oil).	

Food and Water Samples taken—

	Type	*Number*
Fresh Water	Chemical	3
Fresh Water	Bacteriological	572
Milk—genuine	Chemical	56
Milk—non-genuine	Chemical	5
Powdered Milk	Chemical	4
Other Milk and Milk Products	Chemical	4
Ice Cream	Chemical	1
Ice Cream	Bacteriological	..
Other Foodstuffs	Chemical	127
	Total	772

Meat Inspection	*Number*
Carcases Inspected—	
Cattle	238
Pigs	67
Goats	..
Total	305
Carcases Condemned	26
Organs and Parts Condemned	228

11—Legal Proceedings

Defendants, Offences and Results of Action—

	Public Health Regulations	*Pure Food Ordinance*	*Town Planning Ordinance*
Number of cases taken	59	8	63
Convictions obtained	53	8	63
Cases discharged	1	..	..
Cases acquitted	..	..	..
Cases withdrawn	3	..	..
Revenue from fines and costs ..	£273 9 6	£34 5 0	£243 7 6

12—Remarks and Details of any other Special Works Carried out During the Year under Review

(A) A Mosquito Campaign was conducted throughout the Colony during the year.

(B) Sanitation Campaign—

Squatting slabs sold	144
Wooden plugs sold	161
Pedestal sets sold	99
Pedestal risers sold	34
Pedestal seats sold	38
Water-seal slabs sold	37
Pedestal slabs sold	6
Mould for pour flush	16
Wooden flat moulds	2
Block concrete moulds	5
Revenue from above sales	£449 19s. 9d.

13—Seaport and Airport Health Quarantine

Ships given Pratique	518
Landing passengers	4,952
Aircraft given Pratique	2,254
Landing passengers	35,960
Local vessels fumigated	77
Overseas vessels fumigated	1
Aircraft ships treated with Aerosol Bombs	594
International Deratization Certificate issued	4
Aircraft sprayed	807


FIJI
GOVERNMENT PRINTING DEPARTMENT